

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF VIRGINIA  
ALEXANDRIA DIVISION

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UNITED STATES, et al., : Civil Action No.:  
: 1:23-cv-108  
Plaintiffs, :  
versus : Wednesday, September 18, 2024  
: Alexandria, Virginia  
GOOGLE LLC, : Day 8 a.m./p.m. (first part)  
: Pages 1-237  
Defendant. :  
-----x

The above-entitled bench trial was heard before the  
Honorable Leonie M. Brinkema, United States District Judge.  
This proceeding commenced at 9:01 a.m.

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EXHIBITS

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P R O C E E D I N G S

THE DEPUTY CLERK: Civil Action Number  
1:23-cv-108, United States of America, et al. versus Google  
LLC.

Will counsel please note their appearance for the  
record, first for the plaintiffs.

MR. HENRY: Good morning, Your Honor. Ty Henry  
from the Virginia Attorney General's Office on behalf of the  
plaintiff states.

THE COURT: Good morning.

MS. WOOD: Good morning. Julia Tarver Wood on  
behalf of the Department of Justice on behalf of the United  
States plaintiffs. With me are my colleagues,  
Aaron Teitelbaum and Jeffrey Vernon.

THE COURT: Good morning.

MS. WOOD: And Mr. Mene from the U.S. Attorney's  
Office.

THE COURT: Yes.

MS. DUNN: Good morning, Your Honor. Karen Dunn  
for Google, and with me here are Tina Sessions, Lauren Vaca,  
Bill Isaacson, Jeannie Rhee, Matt Spalding and Craig Reilly.

THE COURT: Good morning.

All right. Are we ready to proceed?

MR. TEITELBAUM: Yes, Your Honor. The plaintiffs  
call Scott Spencer.

1 THE COURT: All right.

2 THE DEPUTY CLERK: Can you raise your right hand.

3 Thereupon,

4 SCOTT SPENCER,

5 having been called as a witness on behalf of the plaintiffs

6 and having been first duly sworn by the Deputy Clerk, was

7 examined and testified as follows:

8 (Time noted: 9:02 a.m.)

9 THE DEPUTY CLERK: Thank you.

10 MR. TEITELBAUM: May I proceed?

11 THE COURT: Yes.

12 DIRECT EXAMINATION

13 BY MR. TEITELBAUM:

14 Q Good morning, Mr. Spencer. How are you doing?

15 A Good morning.

16 Q Could you please state your full name for the record

17 and spell your last name?

18 A Scott Spencer, S-P-E-N-C-E-R.

19 Q You left your employment at Google roughly at the

20 beginning of 2023; is that right?

21 A Yes.

22 Q Okay. And you've been deposed a total of two times in

23 that case -- in this case, does that sound right, once this

24 year and once in 2019?

25 A I believe that's correct.

1 Q And both of those times Google's lawyers represented  
2 you at those depositions; correct?

3 A That's correct.

4 Q Okay.

5 THE COURT: Mr. Spencer, can you keep your voice  
6 up a bit louder please.

7 THE WITNESS: All right.

8 BY MR. TEITELBAUM:

9 Q And the microphones, there's sort of two of them right  
10 in front of you there on the ledge, one of them is that long  
11 black bar, just for your awareness.

12 And I don't need to say the exact number, but fair  
13 to say you own a substantial amount of Google stock as of  
14 now?

15 A Yes.

16 Q Okay. Let's talk about your professional background  
17 shortly before you came to Google.

18 You worked at DoubleClick from about 2000 to 2008;  
19 is that right?

20 A That's correct.

21 Q And you worked as a product manager and various other  
22 product management roles there?

23 A That's correct.

24 Q And did you work with Neal Mohan and Jonathan Bellack  
25 while you were there?

1 A I did.

2 Q Okay. And one of the products that you worked on was  
3 DoubleClick for Publishers or DFP?

4 A That's correct.

5 Q And another product that you worked on was the ad  
6 exchange that DoubleClick was developing as well; right?

7 A That's correct.

8 Q Okay. And when you joined Google -- you joined Google  
9 in 2008; is that correct?

10 A I joined Google as part of the acquisition process  
11 which closed in 2008.

12 Q Okay. So you came over with Mr. Mohan and Mr. Bellack  
13 as part of the acquisition?

14 A And many others, yes.

15 Q And many others, okay.

16 So the Court has already heard a fair amount of  
17 testimony about a lot of the subject matters in this case,  
18 so I think you're going to find that we're going to cover  
19 only a few narrow topics from your time at Google.

20 I'd like to start by asking you some questions  
21 about AWBid.

22 Fair to say that AWBid was the technology that  
23 Google used to implement Google Ads bidding on other  
24 exchanges besides AdX; right?

25 A That's correct.



1 Q And up to a point before the implementation of AWBid,  
2 Google Ads did not bid at all on other exchanges besides  
3 AdX; right?

4 A Google Ads would not be bidding on other exchanges.

5 Q And then AWBid -- after the implementation of AWBid,  
6 there was some limited bidding into other exchanges by  
7 Google Ads?

8 A By Google Ads specifically, yes.

9 Q Okay. Now, even before the implementation of AWBid,  
10 there was a general consensus at Google that Google Ads or  
11 AdWords was competitively disadvantaged by its inability to  
12 bid into other exchanges; right?

13 A Well, Google Ads, the advertisers could use Google Ads  
14 or DBM. Google Ads started off as being the buy-side of the  
15 network, so it would only be buying on the network. It was  
16 a long time of evolution before it was buying on exchanges.

17 Q Understood. But there was a view that looking at  
18 Google Ads or AdWords as a standalone product, that it would  
19 have been better for that product to bid unrestricted on all  
20 exchanges; right, not just AdX?

21 A There was a view or -- what do you mean by that?

22 Q The people that worked specifically in product  
23 management roles on Google Ads advocated for unrestricted  
24 bidding across all exchanges for Google Ads; correct?

25 A Some did, yes.

1 Q And there was a somewhat vigorous debate within Google  
2 about whether any cross-exchange bidding should be  
3 implemented; is that fair?

4 A Yes, there was a lot of discussion.

5 Q And that's because there were differing incentives from  
6 the sell-side, the folks who worked on the exchange and the  
7 publisher ad server, versus on the buy-side; correct?

8 A There were many different perspectives.

9 Q Okay. So if we could please take a look at what's been  
10 marked for identification as PTX 66.

11 And Mr. Spencer, you'll have both a binder option  
12 there as well as you can look at this on the screen.

13 THE COURT: Any objection to 66?

14 MS. SESSIONS: No, Your Honor.

15 THE COURT: All right. It's in.

16 (Plaintiffs' Exhibit Number 66 **admitted into evidence.**)

17 BY MR. TEITELBAUM:

18 Q And Mr. Spencer, just taking a look at the top of  
19 PTX 66, this is a February 2011 email that's coming from a  
20 mailing list and it's being sent out to a bunch of people,  
21 including you and Jonathan Bellack and Brad Bender; do you  
22 see that?

23 A Yes.

24 Q And below the top email what we have is sort of an  
25 informational document about the status of AWBid; do you see

1 that, with like a quick reminder of what is AWBid?

2 A Yes, I see that.

3 Q And so when we go to the top of the first page, the  
4 second full paragraph, there's a comment there: "We  
5 understand that many of you have concerns about how this --  
6 this meaning AWBid -- will affect other parts of our  
7 business, particularly AdX and AdSense. The AWBid team is  
8 working closely with the product managers for our display  
9 business (GDN, Invite, AdX and AdSense) to understand the  
10 strategic implications of this effort and how to manage them  
11 thoughtfully"; do you see that there?

12 A Yes.

13 Q So this is just a reflection of how there was internal  
14 debate about whether to implement AWBid at all and by how  
15 much; is that fair?

16 A This looks like it's talking about -- I mean, how it  
17 was going to roll out.

18 Q How and whether it was going to roll out; right?

19 A I can't tell if this is before or after the decision.

20 Q Okay. But ultimately one of the concerns that the  
21 people working on DFP and AdX had was that the exclusive  
22 relationship between Google Ads and AdX was one of the  
23 primary selling points for AdX; right? And this is just  
24 stepping away from this document, just asking you more  
25 generally.

1 A It was a feature.

2 Q And you also in fact recognized that the relationship  
3 between Google Ads and AdX was one of the primary  
4 justifications that Google had available to it for the  
5 20 percent revenue share on AdX; is that right?

6 A It was one of many features that were part of the value  
7 proposition associated with the exchange.

8 Q Okay. Let's take a look at what's been marked for  
9 identification as PTX 198.

10 THE COURT: Any objection to 198?

11 MS. SESSIONS: No, Your Honor.

12 THE COURT: All right. It's in.

13 (Plaintiffs' Exhibit Number 198 **admitted into evidence.**)

14 BY MR. TEITELBAUM:

15 Q And so once again, Mr. Spencer, this is a -- now  
16 looking at a 2014 September email thread that includes you  
17 as well as Mr. Bradstock and Mr. Land; do you see that?

18 A Yes.

19 Q And so there's an email from you at the bottom of the  
20 first page and your first line there is: "As you know,  
21 there are significant concerns over how we can maintain our  
22 20 percent revenue share for the auction."

23 The context for this is given that AdWords or  
24 Google Ads was starting to bid on other exchanges, you were  
25 concerned about being able to maintain the 20 percent

1 revenue share; right?

2 A No. The context for this is the development of Private  
3 Auctions and direct -- programmatic direct, new features  
4 that had different rev shares.

5 Q Okay. But one thing you note here, going back to what  
6 we discussed before, is you say: "Speaking only from the  
7 perspective of AdWords for Google Ads, we want to buy into  
8 all auctions regardless of what the AdX margin is. More  
9 importantly, we do not like the idea of AdWords being given  
10 a disadvantage compared to the other buyers in order to  
11 strengthen the publisher pitch, e.g., uphold the 20 percent  
12 margin"; did I read that right?

13 A Yes.

14 Q In other words, this is your recognition, first of all,  
15 as you mentioned before, that from the perspective just of  
16 Google Ads or AdWords, they would make sense to buy into all  
17 auctions regardless; right, because that would be a better  
18 product?

19 A It was a -- it was part of what they were looking to  
20 do.

21 Q But you also observed at that time that you did not  
22 like the idea that Google Ads was being disadvantaged as a  
23 standalone product just for the sake of benefiting other  
24 products like AdX that Google was operating; is that fair?

25 A Here I was representing the AdWords' perspective that

1 they wanted to buy on other exchanges.

2 Q Okay. So then turning from Google Ads' exclusive  
3 relationship with AdX now to AdX's relationship to DFP, you  
4 and your team recognized that AdX's real-time bidding into  
5 DFP but not into other exchanges was a very strong selling  
6 point for DFP; right?

7 A Sorry, AdX didn't bid into DFP.

8 Q Bidding on inventory in real time that was offered by  
9 DFP?

10 A No, AdX is not bidding.

11 Q Fair to say that AdX is relaying a winning bid from an  
12 auction that it runs?

13 A It doesn't relay. It goes the other direction.

14 Q Well, so what I'm asking is, real-time bidding was only  
15 available for publisher -- real-time bidding from AdX was  
16 only available for publishers using DFP and not other  
17 publisher ad servers; correct?

18 A No. Real-time bidding was, depending on the time  
19 period, it was established as a standard for being able to  
20 bid on any exchange.

21 Q All right. Well, I'm specifically talking about the  
22 2012 to 2013 time frame before Open Bidding and I'm  
23 specifically talking about the relationship between DFP and  
24 AdX.

25 A But AdX didn't bid on DFP.

1 THE COURT: I couldn't hear the answer. What was  
2 that?

3 THE WITNESS: AdX didn't bid on DFP.

4 BY MR. TEITELBAUM:

5 Q Can you explain that a little bit further?

6 A So if you're using DFP, it's your ad server for direct  
7 sales. You're going to put your -- what you're selling as a  
8 publisher into the system. And then it would take that  
9 information, so let's say you're about to sell something for  
10 a dollar and that's the floor price given to the auction.  
11 The bidding happens from DBM or other buyers, AdWords, into  
12 the auction on the AdX side.

13 Q All right. So let me ask the question a slightly  
14 different way.

15 AdX provided the result of a real-time bidding  
16 auction to DFP; correct?

17 A Again, it's the other way around. So DFP provides to  
18 the exchange the price of what it was about to sell  
19 something for, and then the logic to decide whether or not  
20 the exchange wins against that or not was in the exchange.

21 Q All right. I think the Court's heard enough about the  
22 relationship between AdX and DFP already in this trial  
23 anyway, so I think we can move on.

24 Take a look at PTX 116.

25 THE COURT: Any objection to 116?

1 MS. SESSIONS: No, Your Honor.

2 THE COURT: All right. It's in.

3 (Plaintiffs' Exhibit Number 116 **admitted into evidence.**)

4 BY MR. TEITELBAUM:

5 Q And this is an email thread that includes you as well  
6 as Chris LaSala and Marc Theermann from September of 2012;  
7 do you see that?

8 A I'm sorry, I'm still trying to find it.

9 Q Sure. And it's also on the screen if that's easier.

10 THE COURT: It's at the front of the book as well.

11 THE WITNESS: 116. Yes.

12 BY MR. TEITELBAUM:

13 Q This is an email thread that includes you and Chris  
14 LaSala and Marc Theermann and others from about September of  
15 2012; is that right?

16 A Yes.

17 Q And Marc Theermann was someone that reported to you at  
18 the time; right?

19 A No. Marc Theermann I think was in sales.

20 Q Okay. But he was also sales related to DFP and AdX?

21 A Yes. I think it was publisher sales.

22 Q Okay. And so let's go to the bottom of the second  
23 page, which is the Bates number ending in 462.

24 And at the bottom, one of the things that  
25 Mr. Theermann notes is: "This is an amazing time to 'lock



1 in impressions' by offering XFP to publishers with full AdX  
2 Dynamic Allocation. AdX can serve as a tool to pull  
3 publishers on to XFP. By allowing third parties to  
4 integrate with AdX mobile web/app, we are giving away this  
5 advantage. Dynamic Allocation allows AdX to see all XFP  
6 impressions. We lose this advantage behind other ad  
7 servers. Ad servers are sticky and hard to replace. The  
8 next 12 months are a very good time to switch publishers  
9 over. That opportunity will pass. Do we really want to  
10 miss it."

11 Did I read that right?

12 A I'm not quite sure where you were but that sounds  
13 right.

14 Q Okay. And Mr. Theermann is just making an observation  
15 about the availability of Dynamic Allocation was a strong  
16 selling point to pull publishers on to DFP compared to any  
17 other publisher ad server out there; right?

18 A Dynamic Allocation was a unique feature that existed  
19 between DFP and the exchange.

20 Q A unique feature that Google decided not to make  
21 available to any third parties; correct?

22 A I don't think any third parties wanted it.

23 Q Okay. So it's your testimony that no third parties  
24 wanted access to Dynamic Allocation?

25 A I think it was offered at times to -- it requires

1 integration on the actual primary ad server to make it work.  
2 I don't think we ever had anybody who was ever willing to do  
3 that work.

4 Q Okay. But you would agree, just stepping back for a  
5 moment, that the relationship between Google Ads and AdX was  
6 a strong selling point for convincing publishers to use DFP  
7 compared to other publisher ad servers; correct?

8 A DFP and AdX worked really well together. There was a  
9 good integration between them.

10 Q And the reason they worked particularly well together  
11 is because Google imposed a variety of conditions that made  
12 it difficult for publishers to just use one or the other;  
13 correct?

14 A No. We had features that made it so that the inventory  
15 would be better understood by the exchange between DFP and  
16 the exchange. You could use either one separately.

17 Q Okay. So in other words, it's just a result of  
18 features? There was no intent on Google's part to try to  
19 impose conditions to make publishers use both products  
20 together?

21 A They worked better together. They -- there were  
22 restrictions in terms of what types of inventory could come  
23 into the exchange and other policies, but they worked well  
24 together.

25 Q Okay. And prior to, say, 2014, if a publisher was

1 using a third party publisher ad server, could that  
2 publisher get AdX to tell it a price from an AdX auction?

3 A I don't think anyone could.

4 Q You don't think anyone could get a price from an AdX  
5 auction?

6 A You get the result of the auction when it's done, it  
7 wins. Whatever the winning bid is, that's what it's taking.

8 Q And the winning bid would include the winning amount of  
9 the bid; correct?

10 A But that's not passed in real time.

11 Q I'm sorry?

12 A That's not passed back to the ad server in real time.

13 Q All right. Let's move on and talk about PTX 124, just  
14 returning to your testimony that it was just a feature that  
15 AdX and DFP worked well together.

16 THE COURT: Is there any objection to 124?

17 MS. SESSIONS: No, Your Honor.

18 THE COURT: All right. It's in.

19 (Plaintiffs' Exhibit Number 124 **admitted into evidence.**)

20 BY MR. TEITELBAUM:

21 Q And the very top email here is an email from you from  
22 January of 2013; is that right, Mr. Spencer?

23 A 2013, yes.

24 Q Okay. And this is an email thread that's talking about  
25 deployment of various different features in AdX and DFP;

1 right?

2 A This is an email about policy.

3 Q Okay. It's an email about policies -- about Google's  
4 policies?

5 A Yes.

6 Q Okay. So taking a look at the very top email, the  
7 second paragraph.

8 What you observe is: "In terms of your deployment  
9 question, this seems like different attempts to circumvent  
10 the policy. Our goal should be all or nothing. Use AdX as  
11 your SSP or don't get access to our demand. It's a key  
12 feature and we need to use it while it's still proprietary  
13 to AdX."

14 So that all-or-nothing approach, is that the  
15 feature that you were referring to in your earlier  
16 testimony?

17 A The feature I'm referring to is the demand coming in  
18 from AdWords.

19 Q The demand coming in from AdWords that was not  
20 available on third-party exchanges?

21 A Yes.

22 Q Okay. We can move on to a slightly different topic.

23 From your time at Google, you're aware that Google  
24 periodically provided information to various regulatory  
25 authorities to respond to requests for information; is that

1 fair?

2 A I assume we always were.

3 Q Okay. And any reason to doubt that Google would be  
4 accurate in those submissions?

5 A No.

6 Q Okay. And we can do this relatively quickly, but if  
7 you would please take a look in your binder at PTX, first,  
8 1092.

9 THE COURT: Any objection to 1092?

10 MS. SESSIONS: Your Honor, we have no objection to  
11 the document. I don't know if Mr. Spencer has any relation  
12 to or knowledge of this document, but ...

13 THE COURT: All right. Let's lay a foundation  
14 first.

15 MR. TEITELBAUM: Your Honor, these are -- and I  
16 can actually move this along just by offering 1092, 1093,  
17 1096 and 1099 into evidence. These are all responses to  
18 requests for information from regulatory authorities by  
19 Google. And then I can move on to the next topic.

20 THE COURT: Is there any objection to that?

21 MS. SESSIONS: Yes, Your Honor. These are  
22 submissions to foreign regulatory authorities. So I don't  
23 see why they have any relevance to this case or the purpose  
24 for which they are being used given these are a submission  
25 to French regulatory authority and the European Commission.

1 MR. TEITELBAUM: Your Honor, if I could be heard  
2 on this, I could explain the relevance.

3 THE COURT: All right. Relevance is one issue,  
4 but are you disputing in any respect that these are  
5 authentic?

6 MS. SESSIONS: We don't dispute that these are  
7 authentic, but I just don't see the point of using Google's  
8 submissions to a regulatory authority where the laws are  
9 different and not the laws at issue in this case.

10 THE COURT: Well, for example, the first one,  
11 1092, is simply definitions. So ...

12 MR. TEITELBAUM: The first couple pages are  
13 definitions, Your Honor, and then going on later, these are  
14 factual statements that Google is making. We're not trying  
15 to make any arguments or points about foreign law. Google  
16 is providing factual information about products.

17 THE COURT: Descriptions about itself and about  
18 how its products operate.

19 MR. TEITELBAUM: Correct, Your Honor.

20 MS. SESSIONS: Your Honor, I would just note there  
21 are descriptions of the products and how they work in here.  
22 But, for instance, some of these definitions, I'm not sure  
23 whether those definitions were provided by the regulator in  
24 their request for information or whether they were provided  
25 by Google.

1           So not all of these submissions include --  
2 everything in the submission is not going to be a statement  
3 of Google's. Some of this is the questions that the  
4 regulator was asking or the framework that the regulator had  
5 imposed on Google's responses.

6           MR. TEITELBAUM: The only thing we want for the  
7 truth, Your Honor, is Google's statements.

8           THE COURT: I'm going to permit these in.  
9 Obviously, I'll look at them as I'm making my decision to  
10 the extent I think that they're relevant. But I'm letting  
11 them in.

12           These would be statements, in part, by Google  
13 about itself, about how its products operate, and we'll see  
14 whether there are consistencies or inconsistencies with  
15 what's been coming out during the trial. All right.

16           MS. SESSIONS: Your Honor, with two caveats. I  
17 understand your ruling.

18           One would be that not everything in these  
19 submissions is a statement of Google's, as I just noted.  
20 And there may be differences between the way the products  
21 work in other jurisdictions or at the time that these  
22 submissions were made and now.

23           So I would just note that without the opportunity  
24 to discuss particular statements, we have no opportunity to  
25 respond to or to correct those issues.

1           So I might suggest that we meet and confer with  
2 the government about the particular purported statements of  
3 Google that they intend to admit into evidence from these  
4 submissions, and we may be able to agree that some of those  
5 could come in, and then the remainder of these submissions  
6 would not come in to the extent that they are not -- not  
7 statements by Google or not -- do not pertain to the  
8 products at issue in this case.

9           MR. TEITELBAUM: Your Honor, I think these are  
10 statements to a regulatory authority. The document speaks  
11 for itself. They're coming from Google. We're not seeking  
12 to admit anything that's not a Google statement for the  
13 truth.

14           And I think it shows on its face what Google is  
15 saying. There's no need for --

16           THE COURT: No, I think actually Google's argument  
17 is well made. Rather than requiring me to sit and go  
18 through dozens of pages of very small print to figure out if  
19 it's at all relevant to the case.

20           MR. TEITELBAUM: I do have --

21           THE COURT: You should be able to point -- not  
22 take up time right now, sit down with counsel and point to  
23 the particular answers in the particular exhibits that you  
24 feel have relevance to this case and that are not just  
25 cumulative. I don't need to read the same thing over and



1 over again. You've given me four different documents here.  
2 All right.

3 MR. TEITELBAUM: Understood, Your Honor. And I do  
4 actually have specific page numbers right now that I could  
5 give to the Court and we could narrow this.

6 THE COURT: You all work it out. All right.

7 MR. TEITELBAUM: Understood, Your Honor.

8 MS. SESSIONS: Yes, Your Honor.

9 THE COURT: I'm going to at this point not have  
10 them formally admitted yet. See what you can work out.

11 MR. TEITELBAUM: Understood.

12 BY MR. TEITELBAUM:

13 Q Moving on to a different topic, Mr. Spencer.

14 You had a chat function available to you at Google  
15 to communicate with your co-workers; is that right?

16 A Yes.

17 Q And as did pretty much every other employee at Google?

18 A I think every person in the U.S.

19 Q Fair enough.

20 And at Google specifically, chats could be either  
21 on the record or off the record; right?

22 A There was a feature that would store history or not  
23 store history.

24 Q So history on or history off?

25 A That's the feature.

1 Q And on the record or history on meant that the chat  
2 would be preserved for a certain amount of time; right?

3 A I guess.

4 Q Okay. And off the record or history off meant that the  
5 chat would be deleted after 24 hours; right?

6 A I didn't even know it was stored for 24 hours.

7 Q Okay. And in your time at Google, you don't believe  
8 that you ever changed the setting on your chat function to  
9 history on; correct?

10 A Not with intention, no.

11 Q Okay. And you received a litigation hold related to  
12 this matter in December of 2019; right?

13 A I was on many litigation holds. That seems right.

14 Q No reason to doubt that you received a litigation hold  
15 in December of 2019?

16 A No reason to doubt it.

17 Q Okay. And I don't want you to tell me the substance of  
18 these conversations, with one exception, but you had a  
19 conversation with Google attorneys about your use of chats  
20 after receiving the litigation hold; right?

21 A I've had many conversations with Google attorneys, I'm  
22 sure I asked the question about what we're supposed to do.

23 Q Okay. And so this is going to be a yes-or-no question  
24 right now.

25 You told Google attorneys when you were asked

1 about your uses of chats, that you did in fact use chats for  
2 substantive communications even after receiving a litigation  
3 hold; correct?

4 A My general practice was not to use chats for  
5 substantive conversations.

6 Q But you did tell Google attorneys that at least on  
7 occasion, you did use chats for substantive communications;  
8 correct?

9 A I'm sure there was at least one example where some  
10 thread was going on, that I was on, that was with real  
11 content.

12 Q And to your recollection at no point did you ever turn  
13 history on for the chat function; correct?

14 A Yeah. I don't know if I even knew how.

15 Q Okay. If we could now please take a look at PTX 997.

16 THE COURT: Any objection to 997?

17 MS. SESSIONS: Is Mr. Spencer on 997?

18 MR. TEITELBAUM: The metadata reflects that  
19 Mr. Spencer is a custodian and this is a broad distribution  
20 email to Google employees.

21 MS. SESSIONS: Your Honor, we object to 997 as  
22 containing hearsay within hearsay. There's -- it looks like  
23 there's some paraphrasing or reproduction of news articles.

24 MR. TEITELBAUM: Not seeking to introduce the  
25 paraphrasing of news articles for the truth, Your Honor,

1 just for context.

2 THE COURT: I'll overrule the objection. It's in.

3 (Plaintiffs' Exhibit Number 997 **admitted into evidence.**)

4 BY MR. TEITELBAUM:

5 Q And Mr. Spencer, I really just have a couple of  
6 questions.

7 I'm specifically on the third page, if we could go  
8 to the heading, Internal Reaction.

9 So this is an email from Google that was sent to  
10 Google employees shortly after the filing of the Google  
11 search litigation; does that look right to you?

12 A Hold on. I'm still trying to figure out where you are.  
13 Internal Reaction.

14 Q So I'm at the third page of the document, which is the  
15 Bates ending in 391. And it's on your screen if that's  
16 easier.

17 A This is a document with reactions to --

18 THE COURT: Well, do you recall -- wait. Do you  
19 recall, Mr. Spencer, do you recall that there was reaction  
20 to the Google search issue, the investigation?

21 Within Google, do you remember there being a  
22 reaction when it came to you all's attention that there was  
23 this antitrust investigation going into the search features?

24 THE WITNESS: I mean, people were aware of the  
25 news articles.

1 THE COURT: Okay. That's the answer.

2 Let's go.

3 MR. TEITELBAUM: Understood, Your Honor. We're  
4 nearing the end here.

5 BY MR. TEITELBAUM:

6 Q And I just wanted to ask you, Mr. Spencer, do you see  
7 where it says: "Tone is mostly neutral with Googlers  
8 commenting on Kent's email, noting that the stock is largely  
9 unaffected by the announcement and sharing documents on  
10 groups and currents. Note, a few Googlers are advising  
11 their colleagues to communicate with care, and lawyers  
12 posted on threads on ENG-MISC and industry info to remind  
13 Googlers about communication guidelines"?

14 A Yes, I see that.

15 Q So what this reflects is that Google had the technology  
16 and the ability to actually scrape and monitor its own  
17 employees' internal Google communications even as of October  
18 of 2020; right?

19 A No, that's not my understanding.

20 Q That's not your understanding from what's written here  
21 about observations about what Googlers are saying to each  
22 other, including Communicate With Care?

23 A That's not my understanding, no.

24 Q Okay. All right. Well, despite what it says in this  
25 email here, the default for the chat function for the entire

1 time that you were at Google remained as history off;  
2 correct?

3 A Again, I don't know what the history settings were.

4 Q Well, you testified at your deposition as far as you  
5 knew the default was that the history was off; right?

6 A I said that the history settings changed from on or off  
7 at times. I don't know when those dates were.

8 Q Okay. But you left the defaults undisturbed, whatever  
9 they were?

10 A Correct.

11 MR. TEITELBAUM: At this time, Your Honor, also  
12 additionally, pursuant to the stipulation, we would offer  
13 some additional exhibits into evidence.

14 Google has informed us that they do not have any  
15 evidentiary objections to these exhibits.

16 THE COURT: Go ahead.

17 MR. TEITELBAUM: PTX 208. PTX 333. PTX 686, as  
18 narrowed by agreement with counsel. PTX 421. PTX 499.  
19 PTX 578. PTX 832. PTX 485. PTX 1517. PTX 284. PTX 971.  
20 PTX 128. PTX 209. PTX 326. And PTX 847.

21 THE COURT: All right. Now, one of those exhibits  
22 you said as refined or as edited, was that 868 -- 686?

23 MR. TEITELBAUM: That is 686, Your Honor, that's  
24 correct.

25 THE COURT: The version that we have in our books,

1 does that have the corrections or the redactions made to it?

2 MR. TEITELBAUM: The version that was submitted to  
3 the Court before the trial commenced is not narrowed and so  
4 we will provide the Court with a narrowed version of that.

5 And I'll just state for the record that the  
6 narrowed version is the cover page, as well as the pages  
7 ending in 5027, 5028 and 5044.

8 THE COURT: Those pages are removed or the only  
9 ones that make up the exhibit?

10 MR. TEITELBAUM: The only ones that make up the  
11 exhibit.

12 THE COURT: All right. Now you're going to need  
13 to be very careful because again, the thumb drive or disk,  
14 however you gave us the record digitally, has to be  
15 corrected because that's what will go to the Fourth Circuit.

16 MR. TEITELBAUM: Absolutely, Your Honor, we will  
17 do that and we can also provide a narrowed hard copy if that  
18 would be convenient.

19 THE COURT: Well, we'll need narrowed hard copies  
20 for the set that we take back to chambers as well.

21 MR. TEITELBAUM: Understood. We will do both of  
22 those things.

23 THE COURT: Is there a generic theme? Are these  
24 all emails?

25 MR. TEITELBAUM: Not all of them but many of them.

1 They are all Google documents. They relate to the Google  
2 Ads, AdX, tie. They relate to AdX pricing and price  
3 competition. They relate to the integration between AdX and  
4 third-party publisher ad servers. And they relate to policy  
5 with respect to yield managers. And they relate to market  
6 definition and last look.

7 And I'll just say that the purpose of moving these  
8 in now, they relate both to Mr. LaSala's testimony from last  
9 week and Mr. Spencer's testimony. We did not move some of  
10 these in after Mr. LaSala's testimony because we were still  
11 meeting and conferring with Google about them.

12 THE COURT: All right. And again, because you're  
13 moving them in, they will be on the website tomorrow  
14 morning.

15 MR. TEITELBAUM: Absolutely, Your Honor.

16 THE COURT: All right.

17 Does Google want to be heard on any of that?

18 MS. SESSIONS: Your Honor, I'll just note for the  
19 record we obviously disagree with the government's  
20 characterization of those exhibits, but we have no objection  
21 to them being put into evidence at this time.

22 THE COURT: All right. I'm not crazy about this  
23 way of doing it because it doesn't give the Court the  
24 opportunity while the case is coming in and while we're  
25 taking notes on it, to be able to focus any attention



1       whatsoever.

2               So I'm going to deem them to be not that  
3       important, frankly. If it's an important exhibit, it should  
4       be discussed during the trial.

5               MR. TEITELBAUM: Understood, Your Honor, and what  
6       we are attempting to balance is the need to continue to move  
7       expeditiously with the -- our concern about just making sure  
8       that we've built a complete record.

9               We understand that the truly most important  
10       exhibits will be covered live in court.

11              THE COURT: That's fine.

12              MR. TEITELBAUM: Thank you.  
13       (Plaintiffs' Exhibit Numbers 208, 333, 686, 421, 499, 578,  
14       832, 485, 1517, 284, 971, 128, 209, 326 and 847 **admitted**  
15    **into evidence.**)

16              THE COURT: You're passing the witness?

17              MR. TEITELBAUM: I pass the witness, yes.

18              THE COURT: All right.

19              Cross-examination.

20              MS. SESSIONS: Well, Your Honor, thanks to you --  
21       Justina Sessions, sorry, for Google.

22              Thanks to Mr. Spencer for coming today. We have  
23       no questions for Mr. Spencer.

24              THE COURT: Are you planning to call him later?

25              MS. SESSIONS: We are not.

1 THE COURT: Any chance he'll be re-called?

2 MR. TEITELBAUM: If Google doesn't need him for  
3 anything, we will release him as well.

4 THE COURT: Mr. Spencer, then you drew the lucky  
5 card today. So you're free to go or you can stay and watch  
6 the proceedings, but you're not to discuss your testimony  
7 with any witness who has not yet testified. Thank you.

8 THE WITNESS: Thank you.

9 (Witness excused at 9:40 a.m.)

10 THE COURT: All right. Call your next witness.

11 Are we going back to the testimony of your expert?

12 MR. VERNON: Yes, Your Honor, Professor  
13 Abrantes-Metz.

14 We believe Your Honor has the binders. If that's  
15 not right, we do have extra copies.

16 THE COURT: I have them. I have them.

17 MR. VERNON: Okay.

18 THE COURT SECURITY OFFICER: Your Honor, will you  
19 want the oath again?

20 THE COURT: No.

21 You're still under your previous affirmation.

22 MR. VERNON: May we proceed, Your Honor?

23 THE COURT: Yes, sir.

24 DIRECT EXAMINATION

25 BY MR. VERNON:

1 Q Welcome back.

2 A Thank you.

3 Q So I believe -- there's been an adjournment. We had  
4 covered the relationship between DFP and AdX, we covered the  
5 type of analysis you did, we covered quantitative versus non  
6 quantitative, we covered Google Ads to AdX, and we were in  
7 the middle of first look.

8 I think the next question is: Were there any  
9 work-arounds that allowed publishers to call other exchanges  
10 before calling AdX, and again, we're focusing on first look  
11 so the period before header bidding?

12 A Yes. So there was the possibility for publishers to  
13 classify their inventory at a higher priority category than  
14 remnant called the sponsorship item. So if the publishers  
15 categorize their inventory that way, that exchange would go  
16 first, but the evidence is that publishers did not use these  
17 alternative a lot mainly because it interfered with direct  
18 deals they had.

19 And in any case, even the situations where it did  
20 use -- they did use, these required the inventory to be  
21 taken to a higher priority level, and therefore, no longer  
22 remnant.

23 So even through these work-arounds, AdX still had  
24 the exclusive first look over remnant waterfall.

25 Q Does the existence of this work-around change your

1 conclusions about the effects of first look?

2 A No. No, it does not.

3 The reality is that it was not widely used. Even  
4 some Google documents do support that that was true in 2020  
5 when Google decided to stop allowing this practice, it  
6 mentioned that it would only affect a small number of  
7 publishers.

8 And so -- and as I mentioned earlier, AdX would  
9 still always be the first exchange exclusively to be  
10 contacted within the remnant inventory.

11 Q Why did you conclude that first look harmed competition  
12 even though there is at least one work-around?

13 A Well, there's -- that work-around potentially was not  
14 widely used and providing AdX even within the remnant  
15 inventory with the exclusive first look and the right of  
16 first refusal, compared to all of the other exchanges, a  
17 position that no other exchanges were able to compete for at  
18 any price, harmed their ability to grow and to gain scale  
19 and allowed AdX to gain every time more transactions, more  
20 and more over time, enhancing its market power and enabling  
21 it to charge a higher take rate.

22 Q And how do you know that first look had a significant  
23 effect even though there were potentially some work-arounds?

24 A There were -- there was evidence both from Google  
25 internal documents that explained the importance of first

1 look, as others have testified here, of among other things,  
2 the fact that AdX could, through this first look  
3 exclusivity, get to better quality impressions.

4 But there were also various documents from third  
5 parties explaining the impact that first look had on their  
6 business.

7 Q Let's move forward in time and cover last look. And  
8 again, I won't ask you to explain how it works to avoid  
9 repetition, but can you explain for us in practical terms  
10 how last look affects the auctions that publishers ran?

11 A Sure. So last look essentially is equivalent to the  
12 following process. There's a sealed auction that is ran  
13 outside of DFP amongst competing exchanges that is not  
14 inclusive of AdX, and it is as if everybody sends their bids  
15 sealed to this auction and then the winner is determined.

16 So then when that price, the winning price from  
17 the header bidding is determined and is sent to DFP, AdX and  
18 only AdX is able to unseal the -- open the envelope for the  
19 winning bid, know what the winning bid is, and be able -- is  
20 able to bid after everybody else. And in addition is able  
21 to adjust its own bid not to overpay, for example, and to be  
22 able to take the transaction away from another exchange at  
23 just about the same price.

24 So AdX is bidding after everybody else and with  
25 the knowledge of the price to be that none of the other

1 exchanges are able to do.

2 THE COURT: Now that disadvantages the other  
3 exchanges, but it does help the publisher because it gets a  
4 penny or whatever more than what the sealed auction had  
5 resulted in; correct?

6 THE WITNESS: Not necessarily, Your Honor.

7 If you think of a situation where one possibility  
8 for how competition could have developed is that after  
9 everybody else bid, AdX would then put forward its bid  
10 without knowing the price to beat.

11 Of course, the publisher always had at least that  
12 price guaranteed from the header bidding, but chances are  
13 that often AdX would have provided significantly higher than  
14 that bid, if it had been bidding without having the  
15 advantage of seeing the competitor's price. But because AdX  
16 could see the competitor's price, AdX could then reduce its  
17 bid and pay just the minimum price it had to pay to win the  
18 transaction.

19 So it is not necessarily true that the publisher  
20 is made better off.

21 Q Very briefly, just to avoid unnecessary repetition, how  
22 did last look interact with sell-side DRS?

23 A So sell-side DRS is the program that allowed -- that  
24 allowed AdX to move its take rate up or down in order to, if  
25 needed, adjust its bid to win the transaction just above the

1 price of header bidding winning price.

2           So DRS enhanced and made the effects of last look  
3 larger.

4 Q     Why did you find that last look was exclusionary?

5 A     Well, it is exclusionary because it impedes the ability  
6 of other exchanges to compete. If you think of an exchange  
7 that is trying to compete with AdX and is trying to compete  
8 on price, for example, and they place a really good price  
9 forward for the publisher, win the header bidding contest,  
10 but then AdX always comes last and is always able to match  
11 that price if it wants to, it limits or essentially stops  
12 the ability in the sense of competing exchanges to be able  
13 to take market share away from AdX by competing on price  
14 because AdX can always go last and always adjust its price.

15 Q     As an economist, how would you expect last look to work  
16 in a competitive market?

17 A     So as I mentioned earlier, one possibility for what  
18 competition would have looked like with respect to last look  
19 would have been to ask AdX to provide the bid -- its own bid  
20 without having the knowledge of everybody else's bids.

21           Another possibility could have been, for example,  
22 to allow for DFP to allow its publisher customer to choose  
23 which exchange do they want to give a last look to. And if  
24 the publisher had had that choice, competition for that last  
25 look position would have naturally happened and it would not

1 have given this exclusive privilege to AdX.

2 Q How did last look affect competition in the exchange  
3 market?

4 A Well, it impaired competition in the ad exchange  
5 market, as I mentioned earlier, made it very difficult for  
6 exchanges to compete on price with AdX because so long as  
7 AdX header bidding wanted to get that impression, it went  
8 last and knew the price to beat. It was the only exchange  
9 knowing the price to beat and could, therefore, take the  
10 impression away.

11 And by doing so, on multiple transactions, it made  
12 it hard for exchanges to gain scale and effectively compete  
13 with AdX.

14 Q How did last look affect publishers? I think you  
15 mentioned one component of it.

16 How did last look affect publishers with respect  
17 to competition on take rates?

18 A So we mentioned earlier that publishers did not  
19 necessarily win from last look. In fact, some of Google's  
20 documents do mention, do discuss how last look didn't really  
21 much impact publishers increase their revs, it just  
22 increased Google's revenues.

23 And this practice, along with others, concentrated  
24 more and more transactions on AdX and enabled AdX to charge  
25 a higher take rate than it otherwise would have. And that



1 take rate is -- the excess of the take rate is paid by both  
2 advertisers and publishers. So it harmed publishers in that  
3 way as well.

4 Q And what evidence informed your conclusions about the  
5 effects of last look?

6 A There was a lot of evidence on the effects of last  
7 look. Qualitative evidence, for example, as I mentioned  
8 earlier of Google recognizing that last look didn't  
9 necessarily meaningfully impact increase the revenues for  
10 the publishers, that it mostly represented a lot of revenue  
11 for Google.

12 There's experiments ran by Google that estimate  
13 the impact of last look -- of ending last look, and some of  
14 the experiments talk about losing revenues on AdX by 9 or  
15 almost 10 percent of losses in revenues.

16 And there's -- there's also evidence from third  
17 parties on how last look impacted their ability to compete.

18 Q Now let's turn, again moving forward in time a little  
19 bit, to UPR.

20 Why did you conclude that UPR was exclusionary?

21 A Well, UPR forcibly -- so DFP's customers, the  
22 publishers, were forced by DFP not to be able to set higher  
23 floors for AdX.

24 So they were not forced, they were still allowed  
25 to have AdX be sent a lower floor. So UPR did not impose

1 equal floors for everyone; it only forbid publishers from  
2 setting higher floors for AdX, not from setting lower floors  
3 to AdX.

4 And so because it was an imposition on that side,  
5 the consequence was that by not allowing AdX to have higher  
6 floors, it forced AdX floors to be reduced, and it made it  
7 hard for competing exchanges to compete on price because  
8 they were no longer being able to be floored lower than AdX  
9 and shifted a significant amount of transactions into AdX  
10 making it very hard to compete as you would expect on price  
11 across exchanges.

12 Q As an economist, how would you expect DFP to treat  
13 price floors in a competitive market?

14 A Well, just like all of the other conducts of Google  
15 that we have been discussing during my testimony, this as  
16 well is another example where one of Google's products, in  
17 this case DFP, imposed a restriction on its publisher  
18 customers which was not welcome and really not wanted by  
19 several publishers, but they actually had no place to go, so  
20 therefore, DFP was able to impose these undesired  
21 restriction without fear of losing the customers consistent  
22 with DFP's market power.

23 And in a competitive world where DFP would have  
24 faced more competition, if it had imposed such a restriction  
25 that was undesirable to its customers, customers would have

1 gone somewhere else to an alternative. They didn't, because  
2 those alternatives were really not there.

3 And as a contrast, Xandr did recommend floors to  
4 be equal across exchanges but did not impose those floors to  
5 be equal. It did let publishers choose whether they wanted  
6 those floors to be higher or not even, though the  
7 recommendation was that they should be the same.

8 Q How does UPR affect competition in the exchange market?

9 A So UPR does not let the publishers set a higher floor  
10 for AdX; therefore, it is lowering the floor of AdX and  
11 making it more attractive in terms of prices to publishers  
12 that had as a consequence to shift a significant amount of  
13 transactions that would otherwise have gone to other  
14 exchanges that instead went to AdX.

15 And having a meaningful impact over time, it  
16 impairs rival exchanges' ability to compete to gain scale  
17 and clearly to compete on price.

18 Q How does UPR affect publishers?

19 A So publishers wanted the flexibility of having the  
20 ability to set higher floors for AdX for a variety of  
21 reasons.

22 One reason was that, for example, they may want to  
23 develop stronger or new relationships with other demand  
24 sources. And therefore, they wanted the ability to provide  
25 those others with a volume discount, which means that they

1 would pay a lower price than AdX.

2           They may just simply have wanted to reduce their  
3 dependence on AdX. In some cases, I've seen evidence where  
4 the publisher wanted the ability to put higher floors on AdX  
5 because they wanted that ability to negotiate with AdX a  
6 lower take rate.

7           So all of these things were taken away by DFP as  
8 it forced its customers not to floor AdX higher, and  
9 therefore, they were harmed by that restriction that limited  
10 their choices.

11 Q   How does UPR affect competition in the advertiser ad  
12 network market?

13 A   So UPR also forced publishers not to floor Google Ads  
14 higher than other ad networks. And for example, there's  
15 documents that show that the floors in Google Ads, because  
16 of UPR, were reduced from \$3.31 to \$1.01.

17           That is a very big reduction in price floors for  
18 Google Ads, which not surprisingly would have led to a  
19 significant amount of transactions to go to Google Ads that  
20 otherwise would have gone to competing ad networks.

21 Q   What quantitative evidence did you rely on regarding  
22 the effects of UPR?

23 A   There were -- there was several evidence on effects of  
24 UPR, not just internal studies as I have mentioned  
25 quantifying, for example, the effects of the floor price

1 impositions from Google Ads, but also quantifying percentage  
2 of transactions and revenues that moved into AdX because of  
3 UPR. And there were also -- there was also evidence from  
4 third parties talking about the consequence of UPR in their  
5 own businesses.

6 Q Last conduct, Google's acquisition of AdMeld.

7 Can you describe -- and please just do this  
8 briefly, I think the Court has heard some testimony on this.

9 Very briefly, what was AdMeld prior to the merger?

10 A So AdMeld was a yield manager, and yield managers --  
11 one of the features that was liked about yield managers was  
12 that they were able to order the waterfall as we have been  
13 discussing the waterfall that AdX had, they had their own  
14 waterfall but their waterfall was ordered by highest, by  
15 putting on top the demand source that was expected to have  
16 the highest price and so on.

17 So by ability or expectation that the demand  
18 source will provide higher revenue, that one will go on top,  
19 the second highest will go in second, et cetera. So they  
20 had these let's call it more dynamic waterfall, they had  
21 prediction models that allowed them to estimate what the  
22 price from different demand sources were.

23 They also had another ability which was the RTB  
24 capability, real-time bids, where they were able to collect  
25 real-time bids from various demand sources, and they were

1 then able to send those real-time bids back to publisher ad  
2 servers other than DFP. And so this way they were able to  
3 enhance the revenues of publishers.

4 Q Why did you conclude that Google's acquisition of  
5 AdMeld harmed competition I think in the two markets you  
6 mentioned, the exchange market and the ad server market?

7 A So Google saw AdMeld as a threat to DFP. Google wanted  
8 DFP to have control over the remnant inventory to manage how  
9 that remnant inventory was sold. And AdMeld was a threat to  
10 that. In fact, Google saw AdMeld as the largest -- its  
11 largest threat among the yield managers.

12 And another reason, for example, that focusing on  
13 the publisher ad server market, that AdMeld acquisition  
14 further helped DFP was because of the RTB capabilities.  
15 AdMeld was being able to send real-time bids from other  
16 demand sources to competing publisher ad servers from DFP.  
17 And so there was a threat to DFP as well.

18 With respect to the ad exchange market, by  
19 enhancing DFP's market power and eliminating a competitive  
20 threat, the largest competitive threat as seen by Google,  
21 DFP then was able to engage in the -- to have the conducts  
22 we talked earlier, the exclusive first and last look to AdX,  
23 and later UPR that favored AdX. And the real time  
24 capabilities of AdMeld were also a threat to AdX.

25 So at the end of the day, this acquisition had

1 anticompetitive effects both in the publisher ad server  
2 market and in the ad exchange market.

3 Q What features of AdMeld did Google deprecate after the  
4 acquisition?

5 A So after the acquisition, Google deprecated the  
6 features of AdMeld that posed risk to its own products. And  
7 that was the ability of AdMeld that AdMeld already had at  
8 the time of the acquisition, to send real-time bids to other  
9 publisher ad servers. So publisher ad servers that were  
10 competitors to DFP.

11 So Google acquired AdMeld and deprecated the  
12 features that were threatening to its products.

13 Q As an economist, how does the deprecation of a product  
14 feature affect your analysis of the competitive effects of a  
15 merger?

16 A That is what many economists commonly call killer  
17 acquisitions where a firm acquires a main competitor, in  
18 this case what it saw being its main competitor, and  
19 deprecates the features or sometimes shuts completely down  
20 the competitor, but at least deprecates the features that  
21 are a threat to the company's main products.

22 And these acquisitions do tend to lead to  
23 anticompetitive effects.

24 Q Do you recall reviewing evidence about  
25 disintermediation in the context of AdMeld?

1 A Yes.

2 Q Can you explain what that shows?

3 A So the documents show that Google was concerned about  
4 the risk of disintermediation that DFP was facing because of  
5 AdMeld and yield managers in general.

6 DFP was used by publishers to manage both direct  
7 and remnant inventory, and many publishers were starting to  
8 use AdMeld instead for remnant inventory, and Google saw  
9 that as a threat to the control that DFP had over how  
10 remnant inventory is sold.

11 Q And why was that control important, the control of the  
12 remnant inventory?

13 A Because if you control the remnant inventory, you're  
14 then able to help in the decision-making of who's going to  
15 purchase that inventory; namely, if DFP is the source  
16 controlling the remnant inventory, then that remnant  
17 inventory will go through Dynamic Allocation. And because  
18 of that, AdX, as for example its exclusive first look within  
19 that process, and therefore, has the right of first refusal.

20 And so by eliminating or diminishing that risk of  
21 disintermediation and enhancing DFP's market power, enabled  
22 AdX also to enhance its market power.

23 Q Let's turn in your binder -- in the smaller binder to  
24 PTX 88 which has already been admitted.

25 Please turn to the second page which ends in 597.



1 And we will all focus on the notes section. There is a  
2 bullet below that that says: Key Findings Strategic. It's  
3 the third.

4 A Yes.

5 Q In the first bullet point under that says "yield  
6 managers -- sorry, YM break our ability to dynamically  
7 allocate from DFP".

8 What does this show?

9 A This refers to the fear of disintermediation, to the  
10 concern the risk of disintermediation that Google had with  
11 respect to AdMeld.

12 So they were concerned that publishers were  
13 starting to choose more and more AdMeld to control --  
14 essentially to decide how their remnant inventory was sold  
15 instead of DFP.

16 Q And then there's a bullet point right below that that  
17 says: Key Competitors.

18 What does that show?

19 A That shows that Google saw AdMeld, Rubicon and  
20 PubMatic, the three yield managers, as their key  
21 competitors, and that "AdMeld is the largest concern." So  
22 AdMeld was what Google perceived to be its largest  
23 competitor.

24 Q As an economist, when a merger allows the firm to  
25 acquire either the competitor that is its largest concern or

1 a competitor that is one of its three key competitors, how  
2 does that affect your analysis of the effects of the merger  
3 on competition?

4 A Well, if there's a large firm that acquires its key  
5 competitor that poses an actual and/or potential threat of  
6 larger competition, that merger is likely just by that  
7 effect to tend to lead to anticompetitive effects.

8 And those are typically mergers that will call  
9 attention of agencies for review, and that's because  
10 acquiring the key competitor means that you're acquiring the  
11 force that would have been out there that could put  
12 competitive pressure on the firm's potential market power.

13 And therefore, by acquiring such a competitor,  
14 there's a higher chance of enhanced market power by the  
15 merged firm and a higher chance of, for example, raising  
16 prices or lowering output or lowering quality of the product  
17 than otherwise.

18 Q You can set that aside and let's turn to Plaintiffs'  
19 Demonstrative K which is I believe the third-ish tab in the  
20 binder.

21 What does this demonstrative show?

22 A This demonstrative illustrates what I mentioned earlier  
23 as how publishers used DFP aside from when, for example, a  
24 yield manager was not present.

25 So DFP would be used to deal with direct deals

1 between the publishers and the advertisers, and also to deal  
2 with remnant inventory with ad exchanges and advertiser ad  
3 networks.

4 Q And now please to the next demonstrative, Demonstrative  
5 L which is the next one in the binder.

6 What does this -- what does this demonstrative  
7 show?

8 A This demonstrative shows that AdMeld is now part of the  
9 competitive threat on remnant. So AdMeld is threatening to  
10 take away the ability of DFP to determine and control the  
11 tag on remnant inventory and be able to determine who is  
12 going to buy that remnant inventory. And because of that,  
13 it was a competitive threat to DFP.

14 Q You can set that aside.

15 Let's discuss pro competitive justifications.

16 How does an economist assess potential pro  
17 competitive justifications for a conduct or for a merger?

18 A So there's -- a pro competitive justification is  
19 obviously something that is a positive effect associated  
20 with a conduct, and there are typically three factors that  
21 are considered by economists to determine if a particular  
22 conduct or a merger have a pro competitive effect.

23 Q And what are those three factors?

24 A So the first is that that effect needs to be specific  
25 to the conduct, meaning that it would not have existed

1 absent the conduct.

2           The second is that it needs to be enhancing of  
3 total welfare, so it needs to increase the surplus in the  
4 market.

5           So it cannot be just something that reshuffles  
6 surplus between different types of customers; it needs to be  
7 something that makes the size of the pie grow, not just  
8 cutting the pie in different slices, keeping the size of the  
9 pie the same.

10           The third factor is that the conduct needs to  
11 have -- needs to be supported by the evidence.

12 Q     I think you -- did you say the conduct needs to be  
13 supported?

14 A     I'm sorry, the effect needs to be supported. The  
15 candidate effect needs to be supported by the evidence.

16 Q     Did you reach any conclusions about the pro -- or  
17 potential pro competitive effects of these conducts that  
18 we've discussed?

19 A     Yes. I analyzed the candidate pro competitive  
20 justifications put forward by Google's experts, and I  
21 determined that they were in some cases not conduct  
22 specific; in other cases, they did not increase welfare; in  
23 other cases, they were unsupported by the evidence; or in  
24 some cases, they did not verify two or three of the factors.

25           So they were not pro competitive justifications

1 associated specifically with the conducts that I deemed to  
2 be anticompetitive.

3 Q Can you give an example of a pro competitive  
4 justification that Google's experts have put forward that in  
5 your view is not specific to the conduct?

6 A Yes. So for example, with respect to the exclusive  
7 first look to AdX, Google's experts point to studies  
8 conducted by Google that point to the fact that publishers  
9 having access to Dynamic Allocation increased their  
10 revenues.

11 And those studies tend to compare a publisher who  
12 signs up for Dynamic Revenue against a publisher essentially  
13 who does not.

14 Now, signing up to Dynamic Revenue as, you know,  
15 Dynamic Revenue can have different meanings at different  
16 points in time, but just put it simply, means that the  
17 publisher signing up for Dynamic Allocation within DFP is  
18 now able to access AdX and is also able to access Google Ads  
19 because AdX is the only channel to access Google Ads.

20 And so, not surprisingly, a publisher that  
21 accesses Dynamic Allocation is going to increase its  
22 revenues because it is going to access a whole new set of  
23 demand.

24 Now, I do not put forward an opinion that Dynamic  
25 Allocation isn't anticompetitive. Dynamic Allocation has

1 several aspects. It has a waterfall and at the top of that  
2 waterfall there's a dynamic process that allows AdX to  
3 provide real-time bids, but none of those are the conduct  
4 that I opine is anticompetitive.

5 The conduct that is anticompetitive is to grant  
6 the exclusive last look to AdX within Dynamic Allocation.

7 And so studies that speak to the positive effect  
8 of Dynamic Allocation as a whole do not isolate the effect  
9 of exclusive first look to AdX. And therefore, that  
10 benefit, those studies study very many factors changing over  
11 time simultaneously and do not -- are not capable of  
12 isolating the effect of the conduct that is being studied.

13 Q And you gave an example of a pro competitive  
14 justification that Google's experts have put forward that in  
15 your view does not qualify as a genuine justification?

16 A For example, the acquisition of AdMeld. Google's  
17 experts explain that the acquisition of AdMeld allowed  
18 Google to acquire yield management functionality that  
19 otherwise did not have. And that was good for Google, but  
20 the question of a pro competitive effect is whether it was  
21 enhancing the overall market and so whether it increased the  
22 surplus of the overall market.

23 And prior to the acquisition, publishers were  
24 already able to access AdMeld's yield management  
25 capabilities without AdMeld having been acquired by Google.

1 So the benefit was not welfare enhancing because the same  
2 choices were already available prior.

3 In addition, there was -- there were -- there was  
4 no evidence put forward by Google's experts as to whether  
5 Google could have obtained yield management functionalities,  
6 for example, by developing itself, and therefore, having  
7 developed those capabilities not necessarily by acquiring  
8 AdMeld.

9 So I -- my determination was that these pro  
10 competitive candidate did not meet the commonly used  
11 criteria to be classified that way.

12 Q Let's take a step back.

13 What practical effects does Google's conduct have  
14 on publishers and advertisers?

15 A So the conducts that were anticompetitive allowed AdX  
16 to enhance its market power and allowed AdX to keep charging  
17 a super competitive fee, meaning a fee that was higher than  
18 it should have been under competition, and that too high fee  
19 works as a tax per transaction.

20 So the tax was too high, and the two parties  
21 involved in the transaction, the advertisers and the  
22 publishers, they both paid the extra tax that otherwise  
23 would not have existed. So they were both harmed because  
24 the advertisers are paying too much for the impression, the  
25 publishers are receiving too little for the impression, and

1 AdX is keeping an extra chunk in the middle between what the  
2 advertisers pay and the publishers receive.

3 Q How does Google's conduct affect publishers able to  
4 choose the ad tech products that best serve their own  
5 interests?

6 A Well, as I explained through my testimony, all of the  
7 conducts related to diminishing, limiting or eliminating  
8 choices from Google's customers, for example from DFP's  
9 customers, those publishers were faced with restrictions  
10 they did not like that unfavored them; some of them existed  
11 prior and were eliminated; some of the alternatives, and  
12 therefore, they were harmed.

13 But the fact that they ended up not switching away  
14 from DFP despite the fact that they did not have the ability  
15 to choose reflects -- is consistent with market power, and  
16 so publishers were harmed by the conduct and their ability  
17 to switch was limited.

18 Q What effect does Google's conduct have on consumers,  
19 meaning ordinary people who are not publishers or  
20 advertisers?

21 A Well, it is likely that consumers were harmed. So  
22 consumers of web page content.

23 To the extent that these publishers monetized less  
24 than they otherwise would have for impressions in their web  
25 pages, it is -- and by reducing either the quantity of



1 impressions and/or the quality of those impressions because  
2 they're getting less money for each of the impressions,  
3 consumers of those advertisements were -- and products  
4 related were likely to have been harmed.

5 MR. VERNON: Thank you, Your Honor. We pass the  
6 witness.

7 THE COURT: All right. Mr. Isaacson, are you the  
8 person on board for this?

9 MR. ISAACSON: We have some binders to pass out,  
10 Your Honor.

11 THE COURT: All right. Go ahead.

12 CROSS-EXAMINATION

13 BY MR. ISAACSON:

14 Q Doctor, it's Bill Isaacson. I'll be asking you  
15 questions today.

16 I'd like to pick up on the last piece of conduct  
17 you were talking about. Can we look at Exhibit L, the  
18 demonstrative.

19 Here you were talking about AdMeld, and on this  
20 title, Google's DFP Disintermediated By AdMeld, is the  
21 disintermediation you're talking about here by the yield  
22 management technology?

23 A It is the fact that AdMeld, the yield manager, was --  
24 was presenting an alternative to DFP publishers, and  
25 therefore, was at risk of disintermediating DFP.

1 Q Just a simple question, the technology you're talking  
2 about here for the disintermediation was the yield  
3 management technology and not a different type of AdMeld  
4 technology; correct?

5 A As opposed to -- I just wanted to clarify -- the RTB  
6 technology?

7 Q Yes.

8 A Yes, primarily, but of course they both acted to  
9 protect DFP.

10 Q Okay. And I want to explain these two different  
11 things.

12 When you were talking about the competitive threat  
13 to Google and the largest competitive threat to Google, you  
14 were referring to the yield management technology of AdMeld;  
15 correct?

16 A No, not necessarily.

17 Q Okay. The document that you looked at -- exhibit in  
18 your binder from counsel, PTX 88, at page 2 that you looked  
19 at, that's referring to the yield management technology;  
20 correct?

21 A That is correct.

22 Q Okay. And when you said there are documents that say  
23 that AdMeld was the largest threat to Google or a  
24 competitive threat, those documents were talking about the  
25 yield management technology; correct?

1 A That is my recollection, yes.

2 Q All right. And the other type of technology that we're  
3 talking about here is AdMeld technology that would give  
4 access to real-time bidding to other publisher ad servers;  
5 correct?

6 A Yes.

7 Q Okay. And when you said AdMeld deprecated -- I'm sorry  
8 -- that Google deprecated the AdMeld technology, you were  
9 referring to the real-time bidding technology and not the  
10 yield management technology; right?

11 A Yes.

12 Q Okay. Let's get this straight. Okay.

13 All the evidence that you told this Court about a  
14 competitive threat from AdMeld was the technology that was  
15 not deprecated?

16 A No, not necessarily.

17 Q Okay. Every document that you have cited about a  
18 competitive threat from AdMeld technology was referring to  
19 yield management technology; right?

20 A That is correct. But that is not the only threat I  
21 pointed.

22 Q All right. But it's the only one you had evidence for;  
23 right?

24 A The only one I recollect that there were documents  
25 referring to.

1 Q All right. And we are in agreement that Google did not  
2 deprecate -- one of the words I least like in this case --  
3 did not eliminate the yield management technology; it kept  
4 it and offered it to its customers; right?

5 A It did keep that technology, yes.

6 Q All right. And the real-time bidding technology, at  
7 the time of your report and deposition, you didn't know how  
8 many AdMeld -- how many customers used that real-time  
9 bidding feature at AdMeld; correct?

10 A I don't know how many used. I know that it was a very  
11 significant amount of its revenues.

12 Q From the real-time bidding technology?

13 A Yes.

14 Q Okay. And what are you pointing to for that? Do you  
15 think you cited that in your report?

16 A There were documents that referred to how quickly the  
17 business was growing.

18 Q All right. At the time of your deposition, you thought  
19 that they had several customers; right?

20 A I can't recall exactly what I remembered at the time of  
21 my deposition.

22 Q All right. If you look at the binder that we've given  
23 you, and you look at PTX 141, this is a document cited in  
24 your report.

25 THE COURT: 141?

1 MR. ISAACSON: Yes. PTX 141. So this is a  
2 plaintiff exhibit that I would move into evidence.

3 THE COURT: Any objection? There shouldn't be.

4 MR. VERNON: No objections, Your Honor.

5 THE COURT: All right. Plaintiffs' 141 is in.

6 (Plaintiffs' Exhibit Number 141 **admitted into evidence.**)

7 BY MR. ISAACSON:

8 Q All right. And this document, if you look at the Bates  
9 stamp number 448, there's a -- below the first bolded  
10 sentence, "AdMeld can be called via APIs to serve an ad";  
11 that's the real-time bidding technology we're talking about;  
12 right?

13 A I'm sorry, where in the page is it?

14 Q It's also on your screen.

15 Those APIs are the real-time bidding technology  
16 we're talking about; right?

17 A Yes.

18 Q All right. And it says: "There are small handful of  
19 AdMeld sellers that currently have API integrations in place  
20 at the ad server level. While these integrations are being  
21 considered, they are not currently planned. The amount of  
22 customers that AdMeld had for this feature was a small  
23 handful -- small handful"; correct?

24 A There may have been a small handful set of customers,  
25 but those customers may have had important large size

1 business.

2 Q All right. And do you know that?

3 A I recall seeing documents where RTB was growing quickly  
4 and it was already more than half of AdMeld's revenue.

5 Q Okay. If you look at page -- move earlier in the  
6 document at the page that's 442 at the bottom, it says  
7 Overview at the top?

8 A Yes.

9 Q And then it says, What you need to know in 30 seconds.  
10 First bullet: "Almost all the great AdMeld functionality is  
11 moving into AdX".

12 You don't know of any AdMeld technology that was  
13 not of any -- that was not integrated into Google other than  
14 the real-time bidding technology; correct?

15 A That is correct.

16 Q All right. And if I can show you PTX 159 which is in  
17 your binder. This is another document you cited in your  
18 report.

19 THE COURT: Are you moving that in? I'm not sure  
20 if --

21 MR. ISAACSON: Yes, I am moving it into evidence.

22 THE COURT: All right. I'm going to just assume  
23 any plaintiffs' exhibit there's no objection, so it's in.

24 MR. VERNON: No objection.

25 (Plaintiffs' Exhibit Number 159 **admitted into evidence.**)

1 BY MR. ISAACSON:

2 Q And this document is a business analysis and you  
3 recognize -- so if you look at the business analysis on  
4 page 2 and down at costs and risks, do you see that it's  
5 talking about the feature of server-side integrations at  
6 AdMeld; right? This is talking about the real-time bidding  
7 technology; correct?

8 A Yes.

9 Q And in this business analysis, it says: "The  
10 development for this feature is not easy and this was proved  
11 by AdMeld from Brian Adams. We did several server-side  
12 integrations at AdMeld, including with Criteo, and they were  
13 plagued with ongoing issues. At this point I'm more of the  
14 mindset of getting folks to flip to DFP than to get them DA,  
15 Dynamic Allocation. The retrofit of DFP's small business  
16 was targeted primarily at international customers and it  
17 just entered beta. This gives us a new angle here".

18 It then says in terms of implementation costs for  
19 Google: "Google must do significant work in engineering and  
20 PM/policy to make this work" and provides those details.

21 Then under support costs and risks for Google, it  
22 says: "Account managers and the spam team will have a new  
23 type of span to manage. Development will likely be roped in  
24 if there are issues in spam determination."

25 In summary, at the end: "We welcome further

1 business cases and support from sales for building a  
2 business case. If a cumulative business case does present  
3 itself, such that both the break even and opportunity costs  
4 are excluded, then as always we could schedule this work; as  
5 of right now, the business case does not justify the  
6 development".

7 That was the business analysis that you saw of why  
8 not to build out this real-time bidding technology that  
9 AdMeld had; right?

10 A That was part of the documents that I reviewed, yes.

11 Q All right. And that it included the actual quote from  
12 AdMeld about the problems that they were having with these  
13 integrations; correct?

14 A I'm sorry, I couldn't hear you well.

15 Q That included the quotes from Brian Adams of AdMeld  
16 about the problems that they were having with these  
17 integrations; correct?

18 A Yes.

19 Q Okay. Now when you said that -- when there was the  
20 merger of AdMeld and Google, or the acquisition, and that  
21 that had an effect on reducing competition, what market were  
22 you referring to that it reduced competition in?

23 A Both the publisher ad server market and the ad exchange  
24 market.

25 Q And when you say the publisher ad server market or the



1 exchange market, you're referring to the publisher ad server  
2 market and exchange market for open web display?

3 A Yes.

4 Q And when you say the merger affected competition, is  
5 that because there was a merger that included the yield  
6 management technology?

7 A So as I explained earlier, there are two markets that  
8 were affected, and there are two effects in the publisher ad  
9 server market which included that.

10 Q Not quite my question.

11 I understand that you said that's where the  
12 effects happened, okay.

13 Are the effects drawn by the fact that you've  
14 merged AdMeld with yield management technology and Google  
15 that has DFP and the rest of its technology?

16 A I don't understand your question.

17 Q Well, is the -- what part of this merger causes the  
18 effect? Is it the fact that you've now joined Google with  
19 the yield management technology or is it something else?

20 A It is both. That AdMeld was no longer a threat in two  
21 ways to DFP. If we're just focusing on the publisher ad  
22 server market first --

23 Q I'm just asking you about what technology we're talking  
24 about.

25 Is the fact that the merger includes the yield

1 management technology?

2 A And I'm trying to explain that it is both yield  
3 management and RTB, those were two concerns leading to  
4 anticompetitive effects.

5 Q That's all I need to know. Okay.

6 So -- but it's your opinion that when these two  
7 companies merged, that when -- because AdMeld had yield  
8 management technology, that had an effect on the publisher  
9 ad server market for open-web display and for the ad  
10 exchange -- or for the exchange market for open-web display?

11 A Yes.

12 Q Okay. And the competitive threat from yield management  
13 technology was to the publisher ad server market for  
14 open-web display; correct?

15 A Yes.

16 Q And it was to the exchange -- the competitive threat  
17 from yield management technology was to the exchange market  
18 for open web technology -- for open-web display?

19 A Yes.

20 Q Was there also a competitive threat to the advertiser  
21 ad network market for open-web display in your opinion?

22 A I did not put that opinion forward.

23 Q Now, the yield management technology was not a  
24 publisher ad server; correct?

25 A Correct.

1 Q The yield management technology was not an exchange;  
2 correct?

3 A Not the technology, but the RTB capability wasn't like  
4 an early exchange. They were all part of AdMeld.

5 Q All right. But the yield -- my question was about the  
6 yield management technology.

7 The yield management technology was not an ad  
8 exchange; was it?

9 A No.

10 Q And so the yield management technology was a type of ad  
11 tech different from an exchange, different from a publisher  
12 ad server, but it was a competitive threat in the markets  
13 for publisher ad servers with -- for open-web display and  
14 exchange for open-web display; I have that correct?

15 A Yes. Through -- so in the -- for publisher ad server  
16 more directly but then by enhancing as explained here.

17 Q I don't need to know the reasons. I just want to make  
18 sure I have that correct.

19 That yield management technology, while not being  
20 an actual publisher ad server or ad exchange, can be -- was  
21 a competitive threat in those markets for open-web display,  
22 the publisher ad server and the ad exchange?

23 A Yes.

24 Q Okay. And so in your opinion, this is an example of ad  
25 technology that is not an actual, for example, publisher ad

1 server that does have a competitive effect on the publisher  
2 ad server market?

3 A Yes. These had, as I opined, an effect on the  
4 publisher ad server market competition.

5 Q A little bit of background.

6 You don't consider yourself an expert in digital  
7 advertising; correct?

8 A Correct. I'm an economist.

9 Q Your only prior experience with digital advertising is  
10 consulting on one case that had digital advertising as one  
11 of its components; correct?

12 A No, that is not correct.

13 Q Your only --

14 A The case was about digital advertising.

15 Q All right. But you have experience in one prior case  
16 with digital advertising?

17 A Specifically with digital advertising, yes.

18 Q And for your opinions on competitive effects in this  
19 case, you relied on your review of what was produced in  
20 discovery?

21 A Match other evidence as well, that it was publicly  
22 available and -- so other evidence, not just what was  
23 publicly -- what was produced through the case.

24 Q And what you're referring to as evidence would be  
25 things that you read outside of the discovery record?

1 A Correct.

2 Q And is there any document in the discovery in this case  
3 that you recall saying there has been an effect on an ad  
4 tech market involving open-web display advertising by  
5 Google's conduct?

6 A No, I don't recall that. I see that as part of my task  
7 is to make that determination.

8 Q All right. Can we show you figure six of your report.  
9 Do you recognize this diagram from your report?

10 A Yes.

11 Q Okay. And it says: "This report addresses the  
12 category of advertising referred to as open-web display  
13 advertising, meaning web display advertising sold through  
14 third party intermediating products, as reflected in figure  
15 six below".

16 And so the blue boxes are how you're illustrating  
17 what you say this case is about. You start with digital  
18 advertising, you narrow that to web display, you exclude  
19 search in app, instream video and other, and then you narrow  
20 web display to open web and exclude the closed web; right?

21 A Right. Though the exclusion is not part of my opinion.

22 Q Exactly. But it's how you understand the case, how  
23 you're supposed to consider the case?

24 A Yes, but the opinions that I show that I put forward  
25 are consistent with market power even if the markets were

1 different.

2 Q Doctor, counsel can ask you other questions when you  
3 want to explain some things at the end.

4 A Sure.

5 Q You've not heard the term open-web display advertising  
6 before this case; have you?

7 A I don't recall that I have.

8 Q And your understanding of the term open-web display  
9 advertising is that it was simply a name that was given to  
10 the relevant antitrust market that Professor Lee delineated  
11 for this case; correct?

12 A I think that was something that I said at my  
13 deposition; and yes, it was Professor Lee who delineated the  
14 markets, not me.

15 Q And now, is it Professor Lee that delineated the  
16 relevant antitrust markets in this case in the first  
17 instance or was it the plaintiffs' complaint?

18 A As commonly in my experience, complaints do put forward  
19 their views of what the relevant markets are, but then it  
20 falls into a particular expert to actually delineate the  
21 markets.

22 Q All right. The -- you talked about the take rate being  
23 super competitive.

24 You were referring to the ad exchange -- the AdX  
25 take rate; correct?

1 A Yes.

2 Q And you have not attempted to quantify to what extent  
3 that take rate is super competitive; correct?

4 A Correct. That is the assignment of another expert.

5 Q And you have not offered any opinion that the fees  
6 charged by DFP are super competitive; correct?

7 A That's correct.

8 Q And you agree that the fee for DFP DoubleClick for  
9 publisher has decreased over time; correct?

10 A No, I don't put an opinion on that.

11 Q All right. Maybe we've -- if we look at your report,  
12 opening report at paragraph 100. I think you've got --

13 A I don't have the report; do I?

14 Q It's in the large white binder that plaintiff counsel  
15 gave you. And we have a -- we have plenty of other copies  
16 if you need it.

17 A You said paragraph 100?

18 Q Paragraph 100.

19 All right. And what paragraph 100 shows is,  
20 first, from 2013 to 2020, the high end of the DoubleClick  
21 for publisher fee per 1,000 impressions went from 10.5 cents  
22 to 8.5 cents; right?

23 A So which numbers are you comparing? I'm sorry.

24 Q So this would be the numbers for the -- so we're  
25 talking about the fees are on a sliding scale; correct?

1           The amount per impression is different when you  
2 have -- depending on -- the amount per impression is  
3 different depending on the quantity of impressions; correct?

4     A     Yes.

5     Q     Okay. And you see that you have there a fee for  
6 10 million impressions per month; right? And a fee for --  
7 from 10 million up to 50 million impressions per month and  
8 then the amount for more than 6 billion impressions per  
9 month?

10    A     Yes.

11    Q     So the high end of the fee per 1,000 impressions went  
12 from 10.5 cents to 8.5 cents; right, from 2013 to 2020?

13    A     Yes.

14    Q     And from 2013 to 2020, the low end of the fee per 1,000  
15 impressions went from 2.6 cents to 2.1 cents; right?

16    A     Yes.

17    Q     Okay. And you've not expressed any opinion that the  
18 take rate for Google Ads, which you call the advertiser ad  
19 network, is super competitive; correct?

20    A     Correct.

21    Q     Now, you discussed with counsel that Google in your  
22 opinion had harmed -- had harmed publishers and advertisers,  
23 and you talked about that's because the higher take rate,  
24 and that's the -- for AdX, and that's the higher take rate  
25 that you have not quantified; correct?



1 A I quantified the higher take rate. It's on average  
2 20 percent.

3 Q The AdX rate is 20 percent but you didn't quantify how  
4 much of that was super competitive?

5 A Correct.

6 Q And in reaching your opinions on competitive effects,  
7 you did not attempt to quantify any adverse effects on  
8 advertisers; correct?

9 A In my report I talk about many adverse effects to  
10 advertisers due to the various conducts.

11 Q I agree you list them, but you did not try to quantify  
12 any of those adverse effects on advertisers; correct?

13 A Correct. For the opinion that I put forward that they  
14 were harmed, I didn't have to quantify by how much.

15 Q All right. And it's the same for publishers, you did  
16 not attempt to quantify any adverse -- quantify any adverse  
17 effects on publishers, you didn't think that was necessary  
18 to your opinion?

19 A So I may not have undertaken my own separate analysis,  
20 but there are -- there's plenty of evidence, many --

21 Q I'm asking you about -- can I get an answer to my  
22 question?

23 A Sure.

24 Q You did not attempt to quantify any adverse effect on  
25 publishers from the conduct you have described, you didn't

1 think that was necessary to your opinion; correct?

2 A Correct. I didn't have to quantify to put forward the  
3 opinion that the effect was anticompetitive.

4 Q And in reaching -- and when you said you didn't need to  
5 do that, you were saying that you can reach an opinion about  
6 whether conduct is anticompetitive and compare it to whether  
7 it's pro competitive, you can do that without actually  
8 quantifying the effects on the customers; right?

9 A Right, because there was plenty of evidence on the  
10 effect of the customers. I didn't have to do it myself.

11 THE COURT: All right. We don't want editorial  
12 comments. That's what the redirect is for. All right.  
13 Just if it's a yes-or-no answer, that's what it should be.

14 BY MR. ISAACSON:

15 Q Now, you did talk at the beginning of your testimony  
16 and sort of throughout, that it's your opinion that the  
17 conduct in this case restricted the customer choices of the  
18 Google customers; right?

19 A Yes.

20 Q And I want to be specific about that. All right.

21 Now, with respect to the restrictions of real-time  
22 bids from AdX to DFP, okay, what you're saying is that the  
23 restriction of real-time bids from AdX to DFP restricted  
24 customer choice, you're referring to the publishers there as  
25 the customers; right?

1 A If I may explain.

2 Q I would just like to know if it's the publishers you're  
3 referring to?

4 A The publisher customers of AdX.

5 Q Yes. Thank you.

6 And you are saying that the publisher customers of  
7 AdX could not become customers of rival publisher ad servers  
8 and connect to Google's AdX?

9 A I'm sorry, could you please repeat the question?

10 Q So the choice that these customers of AdX don't have is  
11 that they can't become customers of rival publisher ad  
12 servers and get a connection to Google's AdX?

13 A And get the real-time bid from AdX, yes.

14 Q And you're talking about Google establishing a tactical  
15 connection to a competitor, and the fact that Google has not  
16 done that is what's denying customer choice?

17 A No, that is not correct.

18 Q Well, I thought you just said that the denial of choice  
19 here for the customers is that they can't get real-time  
20 bidding from Google on a rival publisher ad server; is that  
21 right?

22 A Yes.

23 Q Okay. Publishers were free to use rival publisher ad  
24 servers, those competitors of Google's, but they just  
25 weren't connected to Google's AdX; right?

1 A Well, they were not connected directly in a way that  
2 they could get real-time bids, yes.

3 Q And for publishers to have the choice that you are  
4 talking about to use rival publisher ad servers and connect  
5 to Google's AdX, Google's AdX would have to integrate with  
6 its competitors to serve those customers; right?

7 A No, because that was a policy of AdX, and publishers  
8 are customers of AdX, they're not its rivals.

9 Q But even without the policy -- I mean, the real-time  
10 bidding doesn't magically go through the air to the other  
11 publisher ad server, Google has to integrate technically  
12 with that other ad server; right?

13 A Yes. Just like all ad exchanges were doing.

14 Q Okay. And does Google deny customer choice every time  
15 it declines to integrate with competitors to provide access  
16 to real-time bids from AdX?

17 A So again, that is not my opinion.

18 Q Okay.

19 A That Google should be forced to integrate with  
20 customers, with rivals.

21 Q All right. Now, going back to the real time -- now  
22 about AdMeld.

23 Going back to that real-time bidding technology,  
24 not the yield management technology, the real-time bidding,  
25 we're talking about the same basic principle here because

1 that technology would have provided real-time bidding to  
2 third-party ad servers; right?

3 A Yes.

4 Q It's the same issue of choice that we've just been  
5 discussing?

6 A Yes.

7 Q All right. With first look and last look, the  
8 customers who are denied choice there are the publishers who  
9 would want to give a first look or last look to an exchange  
10 other than AdX; is that right?

11 A Yes. The DFP publisher customers.

12 Q Right. The DFP publisher customers. Thank you.

13 Now, publishers can offer a first look or a last  
14 look to any ad exchange they want if they're not using DFP;  
15 right?

16 A Yes.

17 Q What we're talking about is that Google's DFP would  
18 have to be designed to give those customers the choice of  
19 giving a first or last look to competitors of Google; right?

20 A No, that is not my opinion.

21 Q I thought your opinion was that it's the customers of  
22 DFP who are being denied the choice to give first looks or  
23 last looks to competitors of Google?

24 A To competitors of AdX; not competitors of DFP.

25 Q Right. Thank you. So let's just repeat that.

1           Is that customers of DFP are being denied the  
2 choice to offer a first or last look to competitors of  
3 Google's AdX?

4     A     Yes.

5     Q     Okay. And in order to provide a first look or a last  
6 look on DFP to competitor exchanges of AdX, you'd have to  
7 make some design changes in DFP; wouldn't you?

8     A     I don't think so. I didn't see evidence because at  
9 least in the but-for world that a possibility that I put  
10 forward, it would just be changing the order, for example,  
11 putting the second exchange first and the reality is that --

12    Q     Doctor, don't you think that requires technical work?

13    A     Not necessarily because DFP was already connected to  
14 those opportunities.

15    Q     Do you know what technical work is required in order to  
16 alter the ability to provide a first look or a last look in  
17 DFP?

18    A     So my opinion is that --

19    Q     Do you know?

20           THE COURT: The question just asks for a yes-or-no  
21 answer.

22           THE WITNESS: I do not know and it was not  
23 relevant for the opinion I put forward.

24    BY MR. ISAACSON:

25    Q     It is not relevant to your opinions that when Google

1 has a product that you say is restricting choices of  
2 customers, that Google would have to make technical changes  
3 in order to increase the customer choices to be shared with  
4 Google's rivals; do I have that right?

5 A Not exactly.

6 Q Pretty close?

7 A More or less.

8 Q Now, uniform price rules, when you say uniform price  
9 rules limit choice, that refers to limiting the choice of  
10 publishers using DFP to set different floor prices; right?

11 A Not correctly, no. It is only about -- UPR was about  
12 not allowing publishers to floor AdX higher. It didn't  
13 forbid them from flooring AdX lower.

14 Q Well -- and that's fine.

15 But what we're talking about are the customers  
16 that you're talking about are DFP publisher customers who  
17 could set different price floors and didn't have to set the  
18 same price floors?

19 A Correct.

20 Q Okay. And the choice you are talking about is that DFP  
21 would have to be -- would have to permit publishers to use  
22 its product to discriminate against Google by setting higher  
23 price floors for Google AdX than its rivals; right?

24 A DFP had always done that and allowed it until it  
25 deprecated that feature, yes.

1 Q And to provide that choice, DFP would also have to  
2 require -- I'm sorry, I'm going to start that over.

3 To provide that choice, the Google technology  
4 would have to allow publishers to make multiple calls for  
5 the same impressions where you lower -- you've heard the  
6 testimony about lowering the price floors. You make a call  
7 at \$10, the price floor, call it \$9, call it \$8.

8 If publishers are going to have choices and you're  
9 not going to have Uniform Pricing Rules, you're going to let  
10 publishers do that cascading waterfall of testing different  
11 price floors; right?

12 A Yes. Like they had always done prior to UPR.

13 Q And you don't have an opinion about whether that  
14 constant process of testing different price floors are good  
15 for advertisers; do you?

16 A No. I discussed some of that in my reports.

17 Q So the restrictions of Google Ads to AdX, when you say  
18 Google Ads restricting bidding primarily to AdX limits  
19 choice, you're referring to the choice of advertisers using  
20 Google Ads; correct?

21 A Yes. I'm referring to the ability of advertisers on  
22 Google Ads to be able to bid across exchanges through Google  
23 Ads.

24 Q All right. Well, the choice you're talking about, I  
25 think we're in agreement here, is that advertisers should be



1 able to use Google Ads to bid into AdX and into rival ad  
2 exchanges?

3 A Yes.

4 Q Okay. So to provide choice, as you define it, Google  
5 has to provide access to Google Ads advertiser customers to  
6 rival exchanges to AdX; correct?

7 A Google just needs -- would need to stop conditioning  
8 the access of Google Ads to AdX.

9 Q It's more than that.

10 You're going to have to make the technical  
11 connections and integrations to the other exchanges;  
12 correct?

13 A Right. Like what Google had developed already in 2011.

14 Q And are you referring to AWBid?

15 A Well, at the time Google was starting to consider  
16 AWBid, it also already had developed the technology to  
17 extend the exchange -- the bidding across exchanges more  
18 widely.

19 Q Is it your testimony that in 2011, Google had a fully  
20 sufficient, safe, built-out technology that you could just  
21 integrate into other exchanges without any difficulties,  
22 latency, spam, et cetera?

23 A No. That is not the opinion that I'm putting forward.

24 Q Okay. Now, when you say Google Ads would have been a  
25 better product if it allowed more customer choice and

1 allowed what you called multi-homing, you mean that Google  
2 would be -- you mean that the product would be a better  
3 quality if customers were given access to Google  
4 competitors; right?

5 A If customers of Google Ads, the advertisers, had been  
6 given the choice to connect to multiple exchanges, yes. And  
7 exchanges are rivals of AdX.

8 Q And when you say -- said to the Court just generally  
9 that Google's product quality was affected by the conduct  
10 here, you're again saying that the product quality was  
11 affected because customers were not given access to Google  
12 competitors for the various reasons you've discussed?

13 A No. No. For example, I was referring to deprecation,  
14 for example, features of DFP that always existed and were  
15 deprecated, such as UPR.

16 Q All right. So, yes, there's some deprecation that  
17 you've talked about but you also said that in your opinion,  
18 Google's product quality is affected when it doesn't give  
19 access to Google's ad tech to Google's competitors; right?

20 A No, that is not exactly correct.

21 Q Okay. Now, in assessing the competitive effect of  
22 Google's conduct, did you assess any benefits Google gave to  
23 competitors by giving access to DV360 advertiser customers  
24 to third-party exchanges?

25 A No, I did not study DV360, only to the extent that I

1 mentioned, that DV360 bid across exchanges, and therefore,  
2 was consistent with visibility to do so.

3 Q All right. I'll come back to that just to confirm  
4 that.

5 But here, in assessing the competitive effects of  
6 Google's conduct, did you assess any benefits Google gave to  
7 competitors by giving access to AdX to buying tools of  
8 competitors?

9 A I'm sorry, could you please repeat the question?

10 Q Sure.

11 You know that AdX gives access to buying tools of  
12 competitors that can bid into the ad exchange; right?

13 A Well, AdX is expected to do so because those are part  
14 of its customers.

15 Q Right. And they're also buying tools that are  
16 competitors of Google; right?

17 A Well, yes, they're competitors in a different market;  
18 but in the ad exchange market, they're customers.

19 Q All right. And did you give any assessment -- or the  
20 benefits Google gave to competitors who had those buying  
21 tools who had access to AdX?

22 A Well, those buying tools are customers of AdX, so I  
23 would expect AdX would want to maximize its customers.

24 Q All right. Try to listen to the question.

25 I wasn't asking you about what you would expect

1 Google to do. Okay.

2 My question is pretty simple. In assessing  
3 competitive effects here, did you assess any benefits Google  
4 gave to competitors by giving access to AdX to its buying  
5 tool competitors?

6 A The buying tools are, again, customers. So I didn't  
7 study them as competitors; I studied them as customers.

8 Q All right. Did you -- in assessing the competitive  
9 effects of Google's conduct, did you assess any benefits  
10 Google gave to competitors by giving access to header  
11 bidding through DFP?

12 A Could you please explain what it means to give access  
13 to header bidding? Header bidding was ran outside of DFP.

14 Q And you could run header bidding in DFP; couldn't you?

15 A Yes.

16 Q And did you assess the competitive effects of Google's  
17 conduct, did you take into account what Google did in giving  
18 access to header bidding through DFP?

19 A In several ways, yes.

20 Q Okay. When you assessed competitive effects, did you  
21 try to determine whether taken as a whole, Google had helped  
22 or hurt competitors through the totality of access it had  
23 given to its ad tech?

24 MR. VERNON: Objection. Vague.

25 THE COURT: Sustained.

1 BY MR. ISAACSON:

2 Q Well, then I'll try that again.

3 You have talked about specific pieces of conduct  
4 and the effects that you saw because there wasn't access  
5 given in certain instances to competitors.

6 Did you look at the totality of access that Google  
7 has given to competitors and then try to make a  
8 determination as to whether there was an anticompetitive  
9 effect?

10 MR. VERNON: Objection. Still vague.

11 THE COURT: I think that's a vague question. I am  
12 sustaining the objection.

13 MR. ISAACSON: Okay.

14 BY MR. ISAACSON:

15 Q In determining whether Google's conduct has been  
16 anticompetitive, did you try and look at whether Google has  
17 helped rivals more than it hurt them?

18 A Rivals with respect to which product?

19 Q Any of them.

20 A Well, anticompetitive effects have to be focused on the  
21 particular market. Particular markets have different  
22 Google's products, so I would need to be specific to which  
23 products we are discussing and which market in order to  
24 determine rivals.

25 Q Did you think -- did you attempt to determine whether

1 Google's conduct -- in determining whether Google's conduct  
2 was anticompetitive in the publisher ad server market for  
3 open-web display, did you try to look at whether Google had  
4 helped rivals more than hurt them?

5 MR. VERNON: Objection. Vague.

6 THE COURT: I think that question is still very,  
7 very vague. Try to make it more specific.

8 MR. ISAACSON: All right.

9 THE COURT: Did you find in any respect that any  
10 rivals were helped by these various Google features you've  
11 focused on?

12 THE WITNESS: So, Your Honor, with respect to each  
13 of the conducts, that conduct, for example, is originated by  
14 DFP let's say, exclusive first look, last look and UPR,  
15 their rivals of DFP are publisher ad servers. Those rivals  
16 exited the market. To a great extent DFP has a 90 percent  
17 market share. They had to change their business line in  
18 order to compete less with DFP.

19 So those rivals were harmed and DFP benefited.  
20 And for each of the conducts, the analysis is conducted this  
21 way focusing on where does the conduct originate and who are  
22 competitors of Google's product in that market and what  
23 happened to the rivals in that market.

24 THE COURT: All right. Thank you.

25 BY MR. ISAACSON:

1 Q With respect to the ad exchange market then, was there  
2 any conduct of Google such as making DV360 advertisers  
3 available that benefited rival ad exchanges?

4 MR. VERNON: Objection. Vague. Asking about all  
5 conduct of Google.

6 MR. ISAACSON: I was trying to repeat the Court's  
7 question with the ad exchange.

8 THE COURT: We've got enough on this. I  
9 understand your argument.

10 MR. ISAACSON: Okay.

11 THE COURT: Move on.

12 BY MR. ISAACSON:

13 Q Just a couple facts here.

14 About the buying tools access, about 22 percent of  
15 the sales you found on AdX comes from third-party buying  
16 tools; right?

17 A I can't recall exactly that number.

18 Q If you look at just paragraph 87 of your report. And  
19 you're reporting there about where sales came from, and you  
20 say 22 percent came from third parties; that refers to the  
21 third-party buying tools; right?

22 A Yes.

23 Q And I think you said DV360 was designed to work with  
24 multiple third-party exchanges; right?

25 A Well, I don't know if I said that exactly, but I

1 believe that is true, yes.

2 Q In fact, DV360 makes all of its advertiser demand  
3 available to rival third-party exchanges; right?

4 A That is my understanding, yes.

5 Q And you found in your report that a significant portion  
6 of DV360 advertising spending was on rival exchanges to AdX;  
7 correct?

8 A If you could please point to --

9 Q Sure.

10 A -- where it is in my report; but in any case, yes, I do  
11 believe that I recall that being the case.

12 Q So if you look at paragraph 221, and there's a footnote  
13 333, and there's numbers here; do you see that?

14 A Yes.

15 Q Okay. So in February 2016, 46 percent of DV360 spend  
16 went to AdX; right?

17 A Is that in a footnote?

18 Q Yes. In your footnote 333, it's the first number that  
19 you cited there.

20 A Yes. Yes.

21 Q And then in 2017, 47 percent of DV360 went to AdX;  
22 correct?

23 A Yes.

24 Q Okay. Then in 2018 and '19, the numbers decline from  
25 43 percent -- declined to 43 percent and then to 30 percent;



1 correct?

2 A Yes.

3 Q And you've seen from the record in this case that by  
4 2022, the sharing with rival ad exchanges from DV360 was  
5 back up to around 44 percent; right?

6 Let me help you. If we can look --

7 A Where is the 47 percent?

8 Q So if you look at tab -- DTX 1993.

9 DTX 1993 has numbers for specific dollar figures  
10 for exchanges. And so we have a redacted version that  
11 redacts their name.

12 And I guess for the record, I'd move to admit --  
13 this is a --

14 You recognize this as a table of data from the  
15 report of Dr. Israel that you had the opportunity to review;  
16 right?

17 A Yes.

18 Q And you had the opportunity to check -- you and your  
19 team had the opportunity to check the numbers in here;  
20 right?

21 A Yes. I do recall this table.

22 Q Okay.

23 MR. ISAACSON: So I'd move to admit DTX 1993. We  
24 would also like to submit a 1993A which would be -- have a  
25 redaction. So that 1993 would be under seal and 1993A could

1 go on the public record.

2 MR. VERNON: We object if this is being admitted  
3 for the truth. It's hearsay. It's from another expert's  
4 report and not Professor Abrantes-Metz.

5 MR. ISAACSON: This is data. No opinions here  
6 from the other expert. That Dr. Abrantes-Metz had the  
7 chance -- saw the report and had the chance to check for its  
8 accuracy.

9 THE COURT: As an expert, are you reasonably  
10 comfortable with the accuracy of the information in this  
11 exhibit?

12 THE WITNESS: Your Honor, DV360 is not part of the  
13 relevant market in this case, so this was not something that  
14 I focused specifically, though I did read Dr. Israel's  
15 report.

16 THE COURT: I'm going to at this point sustain the  
17 objection. Let's move this along.

18 Actually, it's time for the afternoon break.

19 How much longer is your cross going to take?

20 MR. ISAACSON: I've got a little while to go.

21 THE COURT: All right. Then we'll take the break  
22 now until 11:30.

23 (A recess was taken.)

24 BY MR. ISAACSON:

25 Q One thing you did in this case, Doctor, is you

1 investigated the net revenue that Google earned from Google  
2 products in this case, and you found that AdX generated five  
3 times the net revenue of DFP; do you remember that?

4 A Not exactly. Where it is in the report? No.

5 Q Why don't you look at paragraph 94 of your report. And  
6 then along with Footnote 152.

7 And do you see -- if you look at that paragraph  
8 and the footnote, am I correct that in -- for the year 2020,  
9 you extrapolated that DFP made 267 million in net revenue?

10 A Where is it?

11 Q It's your conclusion at the bottom of Footnote 152.

12 A Oh, at the bottom. Yes.

13 Q Right.

14 And that would be about 7 percent of the total net  
15 revenues you say Google reported for its ad tech products;  
16 correct?

17 A For all the products referenced in paragraph 94 all  
18 together?

19 Q Yes.

20 A I haven't calculated, but that seems more or less.  
21 I'll take your word.

22 Q Okay. Now, you testified on direct that users of GAM,  
23 Google Ad Manager, DFP and AdX, were subject to a provision  
24 that required them to make AdX the last source they  
25 contacted; do you remember that topic generally?

1 A Yes.

2 Q Okay. And I believe what you said, there was a  
3 provision that applied to users of GAM, DFP and AdX to  
4 contact AdX, and then they couldn't contact somebody else  
5 after AdX; do you remember that?

6 A Yes.

7 Q And if they contacted AdX, AdX had to be the last  
8 source they contacted; that was your testimony?

9 A Yes. So long as AdX did want to take the impression.

10 Q All right. Now, at the back of your binder, there  
11 should be the Google Ad Manager partner guidelines.

12 And do you recall -- these are cited at  
13 Footnote 530 of your report.

14 Do you remember these are the guidelines with the  
15 provision that you're referring to, and specifically it  
16 would be on page 4 under 2.3 there's a -- there's  
17 restrictions on passing and redirecting inventory; do you  
18 see that?

19 A In 2.3?

20 Q Yes.

21 A Yes.

22 Q That's the provision that you're referring to; right?

23 A Yes. And second on 2.3.

24 Q All right.

25 MR. ISAACSON: Neither side has made this a trial

1 exhibit, Your Honor, so, with your permission, I'll just  
2 read this one paragraph into the record.

3 THE COURT: All right.

4 BY MR. ISAACSON:

5 Q "Restrictions on passing and redirecting inventory.  
6 Once partner has made an ad call for Google monetization of  
7 a given impression, partner is not permitted to pass that  
8 impression through any other system, including partner's own  
9 system, that dynamically or programmatically allocates ad  
10 calls based on actual or estimated real-time pricing  
11 information."

12 This restriction applies one impression at a time;  
13 right?

14 A I'm not a lawyer, but as I read these, yes, even if you  
15 only contact one time, so long as that was that one  
16 impression, this applies.

17 Q All right. So if a publisher decides to give an  
18 impression to GAM or AdX or DFP, then this provision applies  
19 to that impression?

20 A And for every such impression, yes.

21 Q I'm not sure what you mean by "every such impression."

22 You mean the same impression?

23 A I mean every time there is a contact for an impression,  
24 the provision will apply.

25 Q But we're talking about for one impression. Let me put

1 it a different way.

2 The next impression you can do what you want with  
3 it, you're not restricted?

4 A I'm not sure I understand the question.

5 Q Suppose an impression's on a display box up here and  
6 you've submitted it to Google, but there's another box over  
7 here with another impression, you're not restricted with  
8 respect to that other box; are you?

9 A I'm not following your question.

10 Q Okay. Let's try it this way. This is all happening  
11 very quickly, billions of times every day. An impression in  
12 a box comes up because my colleague, Leah Hibbler, is on the  
13 Internet. And then ten minutes later, one of my colleagues  
14 is on the Internet. That's a different impression; right?

15 A Yes.

16 Q The restriction here would be applicable if the  
17 impression that was caused by Leah Hibbler being on the  
18 Internet or on an app, then this restriction would be in  
19 place. But ten minutes later, it's not -- it doesn't apply  
20 to the next impression; does it?

21 A I do not think these -- I don't think this clause is  
22 specific to that in particular.

23 My reading of it is that so long as the impression  
24 is passed on to AdX, there may be an impression now and  
25 another in 10 minutes and another in 30, but if you do

1 choose to send each one of them as they come along, this  
2 clause will apply.

3 Q Exactly. The clause applies if a choice is made to  
4 send an impression to Google as you go along, that's what  
5 we're talking about here, impression by impression?

6 A Correct.

7 Q Okay. You described exclusionary conduct or tying, and  
8 you referred to customers who buy Product A and also have to  
9 buy Product B; do you remember that general topic?

10 A Yes. I don't believe I referred to it as a tie, just  
11 as a restriction or a conditioning.

12 Q Okay. We put together a demonstrative, we can show  
13 you, Abrantes-Metz Demonstrative 1. Oh, I'm informed it's  
14 Number 2. Thank you.

15 So this -- if you assume that Google Ad Manager  
16 has Product A of AdX and Product B of DFP, and you see  
17 there's the real-time bidding that you've been discussing,  
18 and then the third-party publisher ad servers are out --  
19 those are not part of Google; do you see that?

20 A Yes.

21 Q All right. And when you're talking about selling --  
22 putting Product A and Product B together, that's where you  
23 would be required to buy and use both Product A and  
24 Product B; right?

25 A Well, yes. That if you want to buy A, you must buy B.

1 Q Okay. And do you know if you contract with Google Ad  
2 Manager, whether you have to use AdX? Can you just use DFP?

3 A So I was not referring to AdX, just the access to  
4 real-time bids from AdX.

5 Q So my question is: Do you know whether, when you  
6 contract -- when you contract with Google Ad Manager, can  
7 you use just DFP and not AdX?

8 A My recollection is that they were integrated, and,  
9 therefore, if you get one, you get the other. But I can't  
10 recall whether there was a separate option or not, but I  
11 think there might exist.

12 Q Okay. Now, the third-party publisher ad servers and  
13 the real-time bid issue, right, regardless of whether you  
14 have this product sold together or separately, when you're  
15 talking about the real-time bidding issue, you need the  
16 real-time bids to connect to the third-party publisher ad  
17 server; correct?

18 MR. ISAACSON: Matt, maybe draw a line there for  
19 me.

20 BY MR. ISAACSON:

21 Q All right. Whether you sell these together or  
22 separately, when you're talking about the issue of real-time  
23 bidding being exclusive between AdX and DFP, you're talking  
24 about the real-time bids need to be connected to the  
25 third-party publisher ad servers; right?



1 A Not just necessarily they would have to be connected,  
2 but that there would be an ability of the third-party  
3 publisher ad server even if we deem DFP to make a comparison  
4 of real-time bids from different sources versus AdX.

5 Q All right. In order to do that, there would have to be  
6 a connection between -- to the third-party publisher ad  
7 server?

8 A Naturally, as in all exchanges I was aware at that  
9 time, yes, those connections existed.

10 Q And so if you just take the box away, the blue box  
11 away, if these products are sold completely separately but  
12 there's still real-time bids only going from AdX to DFP,  
13 from your point of view, the situation is the same, you  
14 still don't have the relationship to the third-party  
15 publisher ad server that you're looking for?

16 A I'm not understanding your question.

17 Q Okay. When you're talking about the problem -- what  
18 you call a problem of real-time bidding not being provided  
19 to third-party publisher ad servers, right, if you sell AdX  
20 and DFP separately, that doesn't solve that problem; does  
21 it? You still have to have AdX give those real-time bids to  
22 the third-party publisher ad servers?

23 A Yes. Make it accessible. That is my opinion. It's  
24 the conditioning of access to real-time bids to AdX to DFP,  
25 not that the AdX and DFP cannot be bought separately.

1 Q All right. As part of your report, you also looked at  
2 information about header bidding, and you wrote -- and you  
3 found that header bidding adoption had exploded by 2015;  
4 right? If it helps you, look at paragraph 121 of your  
5 report.

6 A I'm sorry, was there a question?

7 Q Yeah. As part of your investigation, you reported that  
8 header bidding adoption had exploded by 2015; right?

9 A Yes.

10 Q And you looked at a presentation from Criteo that said  
11 70 percent of publishers had adopted header bidding by 2016;  
12 right?

13 A I can't recall exactly -- oh. That is quoted in here,  
14 yes.

15 Q Yes. And EMARKETER, the public -- the -- which has  
16 available public information, they were estimating that by  
17 2019, that nearly 80 percent of the top sites in the U.S.  
18 have adopted header-bidding solutions. You also reported  
19 that; didn't you?

20 A Yes.

21 Q Okay. Now, when you were talking about last look, you  
22 referred to the bid being in an envelope and that AdX could  
23 open the envelope and see what the bid was; do you remember  
24 that?

25 A Yes.

1 Q And then you said AdX could beat that bid by a small  
2 amount if it wanted to?

3 A Yes.

4 Q Now, AdX doesn't do any bidding itself; does it? Its  
5 advertisers on AdX participate in an auction to bid; right?

6 A Correct. That's what I'm referring to as AdX bids  
7 coming from its advertisers.

8 Q Yes. So when you're referring to AdX in this  
9 situation, you're referring to buyers in an AdX auction who  
10 all bid for that impression?

11 A Yes.

12 Q Okay. And those buyers don't get an envelope -- a  
13 sealed envelope with the results of the header bidding  
14 auction; do they?

15 A Correct.

16 Q They bid based on the value that they perceive from  
17 that impression?

18 A Yes.

19 Q And, in fact -- well, I'll leave it at that.

20 If we can look at Plaintiffs' Demonstrative J.  
21 This was one of your demonstratives, we'll put it on the  
22 screen.

23 Okay. And this is where you were illustrating how  
24 first look, last look and UPR build market power in the ad  
25 exchange market; right?

1 A Yes.

2 Q All right. Now, during -- and first look and last look  
3 ended in 2019; right?

4 A Yes.

5 Q Okay. And so after 2019, what you're talking about in  
6 terms of the effect of the ad exchange market, the  
7 continuing conduct there would be UPR; right?

8 A Not necessarily, because the effects of first and last  
9 look exclusively to AdX would have extended beyond their  
10 termination.

11 Q So the -- the only continuing conduct was UPR, there  
12 could be effects from the prior conduct, that's your  
13 testimony?

14 A From this chart, yes, but there are effects of AdMeld  
15 and the two restrictions.

16 Q I'm just talking about the publisher ad server conduct  
17 affecting the ad exchange market, which is what you're still  
18 illustrating here; right?

19 A For these three conducts, yes. As of 2019, UPR was in  
20 place, and at the same time, last look was eliminated.

21 Q Now, I'd like to look at PTX 1265. It's a plaintiff  
22 exhibit. This is a chart from their expert, Professor Lee.

23 THE COURT: Hold on a second.

24 All right. Now 1265 is redacted; correct?

25 MR. ISAACSON: Yes. In fact, what I would suggest

1 doing is that we -- I would move to admit 1265 under seal  
2 and put 1265A, the redacted version, on the public record.

3 MR. VERNON: No objection, Your Honor.

4 THE COURT: All right. And so what I'm looking  
5 at --

6 MR. ISAACSON: I think you have the redacted  
7 version. That's what we put in the binder.

8 THE COURT: Oh, all right. That's fine.

9 (Plaintiffs' Exhibit Numbers 1265 and 1265A admitted into  
10 evidence.)

11 BY MR. ISAACSON:

12 Q All right. And you recognize this as a chart of the  
13 share -- this is worldwide of open-web display spend  
14 transacted through ad exchanges for these years, 2018  
15 through 2022.

16 You saw this in Professor Lee's report; right?

17 A Yes. I can't remember if it was exactly his report,  
18 but at least it was a version of this.

19 Q And the dark blue bars at the bottom, right, that's  
20 AdX; right?

21 A Yes.

22 Q Okay. And looking at 2019, you can see those dark blue  
23 bars are just a little under 50 percent; aren't they?

24 A Yes.

25 Q And then by the end of 2022, worldwide, they've fallen

1 to slightly below 40 percent; right?

2 A Yes.

3 Q Okay. So going back to Exhibit L, your  
4 demonstrative -- J, sorry. During the period 2019 when  
5 you're talking about the conduct having an effect on the ad  
6 exchange market, Google's share of that market worldwide was  
7 declining by about ten points; right?

8 A Of which conduct are you referring to as of 2019?

9 Q Any of it. All together. After 2019, when you're  
10 talking about effects of the publisher ad server on the ad  
11 exchange, right, from 2019 to the end of 2022, right,  
12 Google's share of the ad exchange market worldwide declines  
13 by about ten points; right?

14 A More or less, yes.

15 Q And then if we can look at PTX 1266, which I would also  
16 move into evidence on the same basis, with 1266A being the  
17 public version.

18 THE COURT: All right. So both 1265 and 1266 are  
19 in evidence, with just the redacted versions being publicly  
20 available, and the unredacted, though, need to be in the  
21 Court's record.

22 (Plaintiffs' Exhibit Numbers 1266 and 1266A admitted into  
23 evidence.)

24 BY MR. ISAACSON:

25 Q All right. Now, this is the same information only for

1 the United States; do you recognize that?

2 A Yes.

3 Q Okay. And at the beginning of 2019, Google's share is  
4 a little bit over 40 percent; right?

5 A Yes.

6 Q Okay. And the Google AdX share at the beginning of  
7 2019 is around 40 percent, and it declines by the end of  
8 2022 to just above 30 percent; right?

9 A Yes.

10 Q On the topic of first look -- I'm shifting topics  
11 now -- you made a reference to a simulation by Professor  
12 Milgram, and you said that his simulation tested what  
13 happens if publishers were not forced to put AdX first; do  
14 you remember that general topic?

15 A Yes.

16 Q Okay. And that he found publishers only put AdX first  
17 8 percent of the time if they were not forced to put AdX  
18 first; is that what you thought he was doing?

19 A No. That is my calculation of his own simulations.

20 Q All right. And -- right.

21 I think it's your testimony that Professor  
22 Milgram's simulations simulated first, in one situation, how  
23 often was it if publishers were not forced to put AdX first?

24 A Now, his simulation calculated a variety of  
25 possibilities for publishers to be able to put somebody else

1 first, and then I used his numbers to calculate and  
2 contrast.

3 Q And the 8 percent number that you -- that you are  
4 pointing to, the situation in that simulation was comparing  
5 publisher outcomes if AdX had real-time bidding and if it  
6 didn't; right?

7 A Now that is how he uses it. That is not how I use his  
8 simulation.

9 Q Right. But his simulation was making a comparison to  
10 what publishers would think if they compared AdX with and  
11 without real-time bidding; right?

12 A My recollection is that he let other things change that  
13 biased his results.

14 Q All right. But in his simulations, publishers did not  
15 put AdX first very often if AdX didn't have real-time  
16 bidding?

17 A His simulations biased his conclusions, not  
18 necessarily, is my recollection, from the real-time bidding.  
19 But because in one situation he was allowing AdX to offer  
20 the second price if the price was higher than the floor, and  
21 in another comparison, he was forcing AdX to not be able to  
22 give back the second price and just accept the floor and  
23 that caused a big contrast between -- in his conclusion.

24 Q And do you agree with me that in one situation, AdX had  
25 real-time bidding and the other it didn't?



1 A I think that is true, but that was not the core of the  
2 comparison, because if the comparison was just to be what's  
3 the impact of putting AdX first, then making other things  
4 change at the same time confused the results, which is what,  
5 in my opinion, he did.

6 Q I want to ask you as best I can that when --

7 THE COURT: No preamble. Just ask the question.

8 MR. ISAACSON: All right.

9 BY MR. ISAACSON:

10 Q Turning to -- oh, you mentioned Dynamic Allocation.

11 Dynamic Allocation was an existing feature of DFP  
12 when Google click -- when Google acquired DoubleClick;  
13 right?

14 A Yes. That is my understanding.

15 Q And first look, what you call the right of first  
16 refusal, was part of the DoubleClick technology at the time  
17 Google acquired DoubleClick; correct?

18 A The evidence that I read is not completely clear, but I  
19 think there's a high chance that, yes, it was part of it.

20 Q Okay. So about Unified First Price Auctions, with the  
21 move to a first-price auction, you agree that floors were  
22 not expected to directly affect the auction clearing price?

23 A Yes.

24 Q And, therefore, a rationale for having different floors  
25 across auctions was eliminated with Google's move to the

1 Unified First Price Auction; correct?

2 A No, not necessarily.

3 Q A rationale for differential flooring was eliminated  
4 with Google's move to Unified First Price Auction; right?

5 A I'm not understanding whether your question relates to  
6 whether UPR solved that problem, or if just more broadly  
7 with respect to moving from a second to a first-price  
8 auction.

9 Q Well, let's look at paragraph 400 of your report.

10 So beginning with the second sentence of  
11 paragraph 400, you agree with the statement: "With the move  
12 to a first-price auction, floor prices were not expected to  
13 directly affect the auction clearing price"; correct?

14 A Yes.

15 Q And you agree with the next statement that: "Hence, a  
16 rationale for differential flooring, e.g., across first  
17 price and second-price exchange auctions, was eliminated  
18 with Google's move to UFPA." You agree with that statement;  
19 right?

20 A Yes.

21 Q Now, you mentioned several times in your testimony that  
22 publishers complained about the change to UPR, that this was  
23 unwelcome; do you remember that?

24 A Yes.

25 Q At the time you wrote your reports and gave your

1 deposition, you were able to name only two publishers that  
2 were unhappy with the Uniform Pricing Rules after the summer  
3 of 2019; isn't that correct?

4 A I can't recall exactly what I recalled at the time of  
5 my deposition, but those are in my report.

6 Q All right. But -- well, I'm talking about the period  
7 after the summer of 2019. The Court's heard about a meeting  
8 in April of 2019 and communications with publishers that  
9 happened after April and in the summer. So I'm talking  
10 about by the end of the summer of 2019.

11 Are you aware of -- were you aware in your report  
12 to your deposition of any publishers that were unhappy with  
13 UPR after the summer of 2019 other than Vox, who you've  
14 mentioned in your report, and News America, which would be  
15 Ms. Layser, who the Court has heard from?

16 A To the best of my recollection, that is still what I  
17 recall, yes.

18 Q And it's your opinion that the -- that the Unified  
19 First Price Auction and its accompanying changes were  
20 overall a net positive; right?

21 A A net positive for whom?

22 Q A net positive for publishers.

23 A I don't think that is necessarily true. There are  
24 studies that point to that, but there were many changes that  
25 happened at the same time as UPR.

1 Q All right.

2 THE COURT: Well, what were some of those other  
3 ones?

4 THE WITNESS: Excuse me, Your Honor?

5 THE COURT: What were some of the other changes?

6 THE WITNESS: So at the same time there were four  
7 changes. The main changes, really, the three big changes  
8 are elimination of last look, imposition of UPR, and the  
9 move to a first-price auction.

10 BY MR. ISAACSON:

11 Q All right. Could I ask you to turn to PTX 1539 in your  
12 binder.

13 MR. ISAACSON: Do I have this right?

14 THE COURT: I don't think it's in the book.

15 MR. ISAACSON: Maybe it's a typo. Would it be  
16 539, which I do see in the book. Oh, it's in their binder.  
17 That's why. That's why I wanted to start there and make it  
18 easy, but I forgot it was in their binder.

19 THE COURT: What's the number?

20 MR. ISAACSON: 1539, which is in their binder, and  
21 I believe was, therefore, moved into evidence.

22 THE COURT: I think it's already in. Put it on  
23 the screen.

24 BY MR. ISAACSON:

25 Q All right. Now, this document you cited, if you look

1 at paragraph 50 --

2 THE COURT: Now, the date on this is 2016, so, I  
3 mean, you're jumping back and forth. You were in the summer  
4 of 2019.

5 MR. ISAACSON: Yes. At this point I'm going to go  
6 through a couple documents that she cited in her reports to  
7 discuss whether she's accurately describing them, and then  
8 I'm going to be wrapping up. Okay. The witness has talked  
9 about her review of the evidence, and that's what she's  
10 relying on, which is why I'm doing this.

11 BY MR. ISAACSON:

12 Q If you look at paragraph 331 of your report -- and it's  
13 page 176 -- you write there --

14 A I apologize. Which paragraph?

15 Q 331.

16 A Yes. Thank you.

17 Q The Google email notes: "We manage historically to  
18 have an advantage through EDA versus other sources of demand  
19 so our demand could win even if we did not provide the best  
20 CPM on a specific impression." All right. And you cite  
21 your Footnote 501, which is PTX 1539. And that comment is  
22 on the second page at the bottom, the unfair advantage. And  
23 I think you talked about that in your direct also; right?

24 A Yes.

25 MR. VERNON: Objection. I'm not sure if this is

1 the same document. I think this might be a different  
2 document.

3 MR. ISAACSON: I'm in 1539 right now.

4 MR. VERNON: Well, the Bates number is definitely  
5 different.

6 MR. ISAACSON: In any event, she talked about this  
7 language in her direct.

8 MR. VERNON: Is this from 0501?

9 MR. ISAACSON: This is in your binder.

10 MR. VERNON: My point is 501 is to a different  
11 number than 1539. 1539 we did discuss in the trial.

12 MR. ISAACSON: I'm sorry. Footnote 500. I said  
13 the wrong footnote number.

14 BY MR. ISAACSON:

15 Q In any event, you read the language about the unfair  
16 advantage that was on page 2 of this document. You  
17 discussed that during your direct and in your report?

18 A Yes, but I just want to make sure. That is not the  
19 same document as in Footnote 501; right?

20 Q It's the same document in Footnote 500. Sorry.

21 A I'm sorry. Which footnote?

22 Q Footnote 500.

23 A Thank you.

24 Q Okay. The -- there's a reply in the email about the  
25 unfair advantage.

1           Mr. Korula says on the first page in the last  
2 paragraph: "Personally, I think EDA is an unfair advantage  
3 to Google is entirely in the fiction category. We  
4 explicitly ensured fairness for other parties, but people  
5 are good at creating PR narratives."

6           Right. You were quoting one opinion to rely on it  
7 in this email and ignoring the contrary opinion. That's  
8 what was happening here; right?

9 A       No. That is not what was happening.

10 Q       Okay. Then if I can show you DTX 85, which would be in  
11 the black binder. DTX 85. And then if you look at  
12 paragraph 314 of your report.

13           THE COURT: Are you moving 85 in?

14           MR. ISAACSON: Yes, Your Honor.

15           THE COURT: Any objection to 85?

16           MR. VERNON: No Objection.

17           THE COURT: All right. It's in.

18           (Defense Exhibit Number 85 admitted into evidence.)

19 BY MR. ISAACSON:

20 Q       All right. And if you look at paragraph 314 on  
21 page 166 of your report, the second bullet. You say: "In a  
22 2000 email chain, Google forecasted that if GDN Google Ads  
23 were allowed to access inventory on third-party exchanges,  
24 Google Ads' revenues would increase somewhat, but AdX and  
25 AdSense would lose clients." And then you go on to talk

1 about lost impressions. And then you cite that to  
2 paragraph 4 -- Footnote 477, which is DTX 85; do you see  
3 that?

4 A Yes.

5 Q All right. And what you called a forecast is in the  
6 middle of the page, there's an email from someone named  
7 Zachary Goldberg. And he said separately: "I want to gut  
8 check some facts with this crowd. Please respond to this  
9 email with the first thought that pops into your head for  
10 the following statements."

11 All right. These are numbers that he's just  
12 saying I want you to give me your opinion about. You don't  
13 know that there's a forecast here; do you? Or a projection?  
14 And if I can point you to the response email. "Scott and  
15 Jonathan, do you agree with the assumptions below?" All  
16 right.

17 We don't know -- you don't know that Zachary  
18 Goldberg had done a projection and if it were anything other  
19 than numbers that he was assuming for reasons we don't know;  
20 do I have that correct?

21 A No. The top of the email says: "I think that  
22 Goodman's model is sound."

23 Q Yeah. But you don't know what Goodman's model is; do  
24 you?

25 A A fair reading of these emails is that it is the model



1 generated -- used to generate these numbers --

2 Q All right. And so --

3 A -- that are being asked to assess.

4 Q And what you're doing now -- and so just in general in  
5 terms of your method in terms of reviewing the discovery  
6 record, you don't claim any additional expertise as an  
7 economist in reviewing documents accurately; do you?

8 A Correct. I take the documents as they are.

9 Q Okay. PTX 1035.

10 A Where is PTX 1035?

11 Q I'll move on from that.

12 DTX 281.

13 THE COURT: Any objection to 281?

14 MR. VERNON: Objection to relevance. I believe  
15 this is about Bell. Irrelevant and scope, I guess. This is  
16 about Bell, which is less of an issue in this case now.  
17 Also foundation. Not foundation. Relevance and scope.

18 THE COURT: We're not able to hear those  
19 objections, so you're going to need to be at the lectern if  
20 it's more than just a one-word objection.

21 MR. VERNON: Objection. Relevance and scope. I  
22 believe this document is primarily about Project Bell, which  
23 we didn't cover on direct, which is not a big issue in this  
24 case.

25 MR. ISAACSON: Whether or not it's a big issue,

1 what I'm illustrating is that I believe -- this witness has  
2 said over and over again -- she only showed you three  
3 documents -- that she wants to present the evidence and say  
4 this is what the evidence shows. And so I'm just using a  
5 couple illustrations to say this should not be the job of  
6 this witness, because we don't think she's getting it right,  
7 and the Court can read the evidence in the record and make  
8 the correct determinations.

9 THE COURT: This is not going very far,  
10 Mr. Isaacson, frankly.

11 MR. ISAACSON: Okay.

12 THE COURT: I'm going to sustain this objection,  
13 because you need to get this case moving. It's just not  
14 making any sense.

15 MR. ISAACSON: All right.

16 THE COURT: So 281 is not in.

17 MR. ISAACSON: And so for the sake of moving the  
18 case forward, I pass the witness.

19 THE COURT: All right. Is there any redirect?

20 MR. VERNON: Very briefly, Your Honor.

21 REDIRECT EXAMINATION

22 REDIRECT EXAMINATION

23 BY MR. VERNON:

24 Q Counsel asked you about the fact that the AdMeld  
25 technology that submitted real-time bids to third-party ad

1 servers had a small number of customers; do you remember  
2 that?

3 A Yes.

4 Q As an economist, are you familiar with how economists  
5 analyze what's called mergers involving nascent competitors?

6 A Yes.

7 Q Can you explain how those principles apply here?

8 A Even if those customers were small at the particular  
9 moment in time, namely at the time of the acquisition, to  
10 the extent that such business represented a competitive  
11 threat into the future because of potential and real growth  
12 of that business and therefore growth of those customers,  
13 that type of likely future competitive effects are taken  
14 into account in these types of mergers.

15 Q I think counsel also asked you about the quantitative  
16 work that you did and did not do, and you started to say  
17 that you had plenty of evidence.

18 Will you just explain what you were starting to  
19 say?

20 A With respect to the AdX fee?

21 Q I think it was more generally counsel was asking you  
22 about whether you did sufficient quantitative work of your  
23 own. You had started to say I had plenty of evidence, and  
24 then I think the answer stopped.

25 What were you trying to say?

1 A Well, that I undertook quantitative analysis of my own  
2 where I saw that I needed to do so. To a great extent,  
3 there was a wealth of evidence produced by Google's own  
4 studies, and by third-parties' evidence as well that spoke  
5 to the size of the effects. And even when that evidence was  
6 not quantitative in nature, which very commonly it was, it  
7 was qualitative. For example, explaining how and why rival  
8 publisher ad servers to DFP exited the market. All of those  
9 are examples of qualitative evidence that is considered by  
10 the economists in making a determination of competitive  
11 effects.

12 Q Counsel also asked you whether I guess undoing any of  
13 the conduct would require forced integration with rivals; do  
14 you remember that?

15 A Yes.

16 Q I won't go through all of it, but let's take UPR.

17 In a competitive market as an economist, how would  
18 you expect DFP to treat price floors?

19 A Well, in a competitive market, meaning a market where  
20 DFP did face competitive pressure, DFP would not have been  
21 able to force a change onto its publisher customers that was  
22 undesirable by them, because those customers would have left  
23 DFP into a competing publisher ad server.

24 So the fact that DFP was able to impose on its  
25 customers something that they did not want to and was not

1 afraid of losing those customers somewhere else is an  
2 important part of evidence in the determination of  
3 anticompetitive effects in this market.

4 Q And would achieving that world, meaning a world where  
5 DFP publishers have the choice of what floors to set for  
6 their exchanges, would that require any forced  
7 interoperation with exchanges?

8 A No. It just required DFP not to deprecate features  
9 that it already had. Prior to UPS -- to UPR, publishers in  
10 DFP could set AdX higher floors, and DFP deprecated that  
11 feature.

12 Q Counsel also asked you about first look.

13 What would you expect as an economist to happen in  
14 a competitive market with respect to first look?

15 A With respect to first look, one possibility is for  
16 competition to exist for gaining the first position in the  
17 remnant waterfall. That means in a market where, again, DFP  
18 faced competitive pressure, it would not have been able to  
19 impose the choice of the restriction of putting AdX at the  
20 top of the remnant waterfall when that was something that  
21 many of its publisher customers would not benefit from  
22 because they, under a competition, would have moved  
23 somewhere else.

24 And so a competitive world would have been a world  
25 where DFP would have served the interests of its publisher

1 customers, and if the interest was to put somebody else  
2 first, that they would be able to put somebody else first,  
3 and that didn't necessarily imply anything drastically to be  
4 changed, only that, for example, in the actual world, AdX  
5 went first, and if AdX decided not to take an impression,  
6 then DFP would call the second-in-line exchange.

7 And in the possibility I'm putting forward is that  
8 if the publisher thinks that the second-in-line should  
9 instead have been first, then all that would have to be done  
10 would be for DFP to call that exchange first rather than  
11 calling second. It's an exchange or demand source DFP was  
12 already connected to, it was just a change in the order.

13 Q Counsel also asked you whether you had an opinion about  
14 multiple calls, or I think it's also been called price  
15 fishing; do you remember that?

16 A Yes.

17 Q And you said you did have an opinion, but you didn't  
18 say what it was.

19 What was your opinion? Did UPR reduce the problem  
20 sometimes referred to as price fishing?

21 A No, no not necessarily. So as I explained, UPR only  
22 forbids publishers from flooring AdX higher than ad  
23 exchanges and does not forbid publishers from flooring AdX  
24 lower which benefits AdX with respect to ad exchanges.

25 So publishers could still price fish from below.

1 They were still able to call for the same impression,  
2 multiple sources, trying to play with different floors to  
3 try and get a different price.

4 So that was not eliminated, but even if -- to the  
5 extent that that were, in fact, a problem, DSPs had already  
6 technology developed to deal with those problems, so one  
7 could have pursued a less restrictive option if that was the  
8 problem that was attempted to be solved.

9 Q You also mentioned in your direct that pro-competitive  
10 justifications have to increase the surplus or increase the  
11 size of the pie.

12 Does limiting price fishing do that?

13 A No, it does not. It just transfers money from  
14 publishers and advertisers or vice versa depending on  
15 whether you allow it or not. Of course to the extent that  
16 UPR channels more transactions to AdX, it transfers this  
17 surplus between publishers and advertisers but gets AdX to  
18 keep a bigger share of it.

19 Q Can we turn quickly to PTX 1539, which is in the small  
20 white binder.

21 A Yes.

22 Q Counsel asked you about the language at the bottom of  
23 Mr. Korula's email on the first page where Mr. Korula  
24 writes: "Personally, I think 'EDA' is an unfair advantage  
25 to Google. It is entirely in the fiction category"; do you

1 see that?

2 A Yes.

3 Q And EDA refers to the mechanism through which Dynamic  
4 Allocation allows AdX to compete for some impressions that  
5 had previously been reserved for guaranteed; is that right?

6 A Yes.

7 Q Did you argue in your direct testimony that EDA was  
8 anticompetitive, that aspect of it?

9 A No.

10 Q If you look up to Mr. Korula's email where there's a  
11 bullet point numbered one; do you see that?

12 A Yes.

13 Q He writes: "Header bidding allows publishers to have  
14 competition between real per impressions CPMs from third  
15 parties and AdX. Before this, it was third-party average  
16 CPMs and AdX real-time bids, but this, third-party averages  
17 versus AdX real bids, was true even with regular Dynamic  
18 Allocation pre EDA"; do you see that?

19 A Yes.

20 Q Did you express an opinion during your direct about  
21 whether AdX competing with real-time bids against  
22 third-parties' static bids, was that a part of what you were  
23 talking about with first look?

24 A Yes. The fact that AdX was granted the exclusive first  
25 look in the waterfall, whether it was through Dynamic



1 Allocation or Enhanced Dynamic Allocation.

2 Q And is Mr. Korula saying in this paragraph that that  
3 difference, the third party -- third parties having an  
4 average CPM and AdX having a real-time bid, is he saying  
5 that that difference is fiction?

6 A No.

7 Q Counsel also asked you about the feasibility of Google  
8 Ads buying on other exchanges; do you remember that?

9 A Yes.

10 Q What opinions have you formed about the feasibility of  
11 Google Ads buying on other ad exchanges other than AdX more  
12 than with respect to remarketing impressions?

13 A Well, I looked at how the market -- how contemporaneous  
14 evidence existed at the time. And, for example, as  
15 mentioned here, DV360 did use a variety of exchanges to bid  
16 onto, and that's an -- Google's products. AWBid is the part  
17 of Google Ads that eventually was allowed to bid in other  
18 exchanges for primarily remarketing purposes, and,  
19 therefore, confirms that those types of connections are  
20 feasible.

21 And a variety of other buy-side tools were  
22 connected to a multitude of exchanges. After all,  
23 connections is the core of the business of all of these  
24 tools. They cannot function without connecting, and they  
25 typically connect to a variety of sources, that's what they

1 do.

2 And the fact that even as early as 2011 when  
3 Google was contemplating potential bidding across exchanges  
4 for Google Ads, that capability was being developed, and the  
5 evidence seems to point that it may already, to a great  
6 extent, have been in place, to have Google Ads bid across  
7 exchanges not just for remarketing purposes, primarily, but  
8 more widely. But the reason that it was not implemented was  
9 because, as Google stated, they saw Google Ads as the  
10 competitive advantage for AdX, and if they let Google Ads be  
11 accessed in other ways, nobody would want to use AdX, and  
12 even their publisher ad server business would suffer.

13 Q Thank you, Dr. Abrantes-Metz. We pass the witness back  
14 to Google.

15 THE COURT: Any recross?

16 RE-CROSS EXAMINATION

17 BY MR. ISAACSON:

18 Q Just one point of clarification just to make sure I  
19 didn't misunderstand what you're saying.

20 Under the Uniform Price Rules, there had to be the  
21 same floor price for all the exchanges in DFP; correct?

22 A My understanding of UPR is that it forbids publishers  
23 from flooring AdX higher within DFP, not to floor AdX lower.

24 Q So you believe under the Uniform Pricing Rules that you  
25 could have a lower price floor for AdX than the other

1 exchanges?

2 A That is my understanding of the documents, yes.

3 Q All right. Thank you.

4 THE COURT: All right. Does anybody expect to  
5 call this witness again?

6 MR. VERNON: We do reserve the right to call  
7 Professor Abrantes-Metz on rebuttal.

8 THE COURT: All right. So, again, I think you're  
9 staying in court. Just make sure you're not discussing your  
10 testimony with any witness who has not yet testified. Thank  
11 you.

12 THE WITNESS: Yes, Your Honor. Thank you.

13 (Witness excused at 12:26 p.m.)

14 THE COURT: All right. Let's call the next  
15 witness.

16 MR. WOLIN: Your Honor, Michael Wolin for the  
17 United States.

18 We call as our next witness, Mr. Matthew  
19 Wheatland.

20 Thereupon,

21 MATTHEW WHEATLAND,  
22 having been called as a witness on behalf of the plaintiffs  
23 and having been first duly sworn by the Deputy Clerk, was  
24 examined and testified as follows:

25 (Time noted: 12:27 p.m.)

1 THE DEPUTY CLERK: Thank you.

2 MR. WOLIN: May I proceed, Your Honor?

3 THE COURT: Yes, sir.

4 DIRECT EXAMINATION

5 BY MR. WOLIN:

6 Q Mr. Wheatland, could you please introduce yourself to  
7 the Court.

8 A Yeah. I'm Matthew Wheatland, chief digital officer at  
9 Daily Mail in the U.S.

10 Q What is The Daily Mail?

11 A Daily Mail is a news publisher. We have a print  
12 newspaper in the UK. It's one of the most widely-read  
13 newspapers in the UK. And we've got a detailed website with  
14 a global presence. We currently have roughly 17 million  
15 users in the U.S. across our website possessing one of the  
16 top ten largest U.S. news websites.

17 Q You mentioned your role as chief digital officer.

18 What are your responsibilities as chief digital  
19 officer for Daily Mail?

20 A I oversee our indirect monetization in the U.S. and our  
21 global commercial data.

22 Q Before your current position, what other positions did  
23 you hold at Daily Mail?

24 A I've held a couple of other positions. I was director  
25 of programmatic, and I was director of global operations.

1 They've all focused broadly on the area of commercial  
2 operations and programmatic advertising.

3 Q And you mentioned that Daily Mail is a publisher.

4 What type of content does Daily Mail publish?

5 A Primarily, Daily Mail publishes sort of breaking news,  
6 general interest reads, entertainment and show biz. We have  
7 other verticals as well, sport, finance, health content. We  
8 publish about 1,000 articles a day.

9 Q And what countries does Daily Mail operate in?

10 A We operate globally. We're headquartered in the UK.  
11 We've got offices in Australia, and we've got offices across  
12 the U.S. in New York, D.C. and L.A.

13 Q And how does Daily Mail compare in size to other web  
14 publishers?

15 A Globally, we reach about 170 million users each month.  
16 So it puts us as one of the largest English language  
17 newspaper websites in the world. Among other U.S. news  
18 sites, I mentioned we're top ten.

19 Q And what product does Daily Mail use as its publisher  
20 ad server?

21 A At the moment, we use Google's ad server GAM, formerly  
22 known as DFP.

23 Q How long have you used DFP?

24 A As long as I've been in the business. So at least  
25 12 years.

1 Q And during that time, has Daily Mail ever analyzed  
2 whether it's possible to switch away from DFP to another  
3 publisher ad server?

4 A Yeah, we've looked into this.

5 Q Mr. Wheatland, I'm going to ask you to look in your  
6 binder at the document that's marked PTX 1717 and ask you if  
7 you recognize that document.

8 THE COURT: Any objection to 1717?

9 MS. RHEE: If a foundation would be laid. I don't  
10 know what this document is, Your Honor.

11 THE COURT: All right.

12 THE WITNESS: Yeah. I recognize this. Yeah.

13 BY MR. WOLIN:

14 Q Mr. Wheatland, was this document prepared in the normal  
15 course of business at Daily Mail?

16 A Yeah.

17 Q And what was your involvement in the preparation of  
18 this document?

19 A So it was -- this document was commissioned by my UK  
20 counterpart, and the actual individuals that pulled the data  
21 were on the data team that reported to me.

22 Q And you said they reported to you.

23 What -- was the document prepared at a time when  
24 those individuals who reported to you had knowledge of the  
25 subject matter in the document?

1 A Yeah. Yep.

2 MR. WOLIN: Your Honor, we would offer this  
3 document as a business record of Daily Mail.

4 THE COURT: I'm permitting it in, yes.

5 MR. WOLIN: Thank you.

6 (Plaintiffs' Exhibit Number 1717 admitted into evidence.)

7 BY MR. WOLIN:

8 Q Mr. Wheatland, you mentioned analysis of switching away  
9 from DFP.

10 What connection does this document have to Daily  
11 Mail's analysis of whether it was possible to switch away  
12 from DFP?

13 A This was around the time that we were looking at other  
14 ad server alternatives, and one of the things that we  
15 learned -- or that we knew and essentially wanted to  
16 reaffirm was that you can't access Google AdX demand in real  
17 time through any other ad server. So we basically thought  
18 to ourselves how much revenue would we lose if we didn't  
19 have access to AdX demand, and that is what this document  
20 was calculating.

21 Q So when did Daily Mail undertake this analysis?

22 A It was around the middle of 2019.

23 Q And what other publisher ad servers did you consider as  
24 an option at that time in 2019?

25 A We had spoken to Smart AdServer, and we had spoken to

1 Xandr, formerly known as AppNexus.

2 Q So I want to look at the document itself, and we'll  
3 start with the first page, which is on the screen for you  
4 there. The title is "Google AdX Value."

5 So why did you analyze the value of Google's AdX  
6 in connection with a decision about whether to switch to  
7 another publisher ad server?

8 A Because we assumed that any ad server switch would mean  
9 that we would need to forgo the AdX revenue, and we wanted  
10 to calculate what the financial impact would be on our  
11 business if we no longer had access to AdX demand.

12 MR. WOLIN: Could we please turn to the third page  
13 of the document and put that up on the screen. Thank you.

14 BY MR. WOLIN:

15 Q So this third page of Bates number ending in 644, the  
16 slide is titled "How Much AdX Demand Is Unique?" Do you see  
17 that?

18 A Yeah.

19 Q And what was analyzed in this slide?

20 A Here we looked at how much revenue was generated from  
21 AdX when AdX was the only bid, and then we could assume that  
22 all of that revenue, because AdX was the only bidder in  
23 those instances, would have been lost if we didn't have AdX  
24 revenue.

25 Q The slide has the percentages 45 percent and 55 percent



1 in the middle.

2 What do those refer to?

3 A This means of the impressions that Google AdX won,  
4 around 50 percent of the time there was no bid from any  
5 other exchange.

6 Q And what did that tell you about the demand that was in  
7 AdX?

8 A That the demand was unique and not coming through other  
9 channels.

10 Q Let's please turn to the next page, the fourth page  
11 with Bates number ending in 645. And the title here is  
12 "What Happens When We Replace Currently AdX Impressions With  
13 The Next Best Wrapper Bid"; do you see that?

14 A Yes.

15 Q Could you explain what this slide was showing?

16 A So this slide is showing the difference between AdX's  
17 winning price and the highest losing bid. And we assumed  
18 that that's the incrementality of AdX when we had a bid from  
19 a non-Google bidder, and we would assume we would lose  
20 incrementality. So that's what this was calculating.

21 Q Please turn to the next page, the fifth page. The  
22 title of this one is "Considering Increased Shading After  
23 Losing AdX Auction Pressure." And, again, could you explain  
24 what's being shown on this slide?

25 A So this is showing -- and this was utilizing a natural

1 experiment that occurred in our data. When AdX is not live,  
2 there's a reduction in auction pressure, which allows  
3 non-Google exchanges to win inventory more easily. So if  
4 AdX was not in the auction, not only would you lose the  
5 revenue from AdX, there is an additional knock on, and we  
6 would put this down to bid shading from non-Google buyers  
7 where they could buy a slightly lower price without AdX.

8 MR. WOLIN: And there's one final slide. So we'll  
9 turn to the last one, please.

10 BY MR. WOLIN:

11 Q And this sixth page has the title "MailOnline UK.  
12 Revenue At Risk If We Pull AdX."

13 And what did Daily Mail -- what conclusion was  
14 reached on this slide?

15 A So we added together the first two revenue numbers, and  
16 we were calling that sort of unique AdX demand that we would  
17 lose. And we then took into account bid shading from  
18 non-Google exchanges, add that together, and it came to  
19 355,000 pounds a month.

20 This was looking across our open-web display  
21 revenue in the UK. So the 355 over the 1268 will give you a  
22 number of about 28 percent. So we concluded that we would  
23 lose roughly 28 percent of our programmatic revenue if we  
24 switched off AdX. If we didn't have access to AdX, sorry.

25 Q And so you said a few moments ago that you considered

1 Smart and Xandr as potential possible other ad servers. I  
2 want to ask you about some other companies.

3 What ability does Daily Mail have to replace DFP  
4 with technology that's provided by Facebook, which is now  
5 called Meta?

6 A Facebook doesn't offer a publisher display ad server.

7 Q And what about Amazon, what ability would Daily Mail  
8 have to replace DFP with technology from Amazon?

9 A Again, the same situation. We wouldn't be able to do  
10 that.

11 Q And what about Disney?

12 A Same answer. They don't offer a publisher display ad  
13 server.

14 THE COURT: I'm sorry. What was the last?

15 THE WITNESS: They don't offer a publisher display  
16 ad server.

17 BY MR. WOLIN:

18 Q What ability does Daily Mail have to replace DFP  
19 entirely with a header bidding wrapper?

20 A I don't think that would be possible. There's lots of  
21 functionality that we required from an ad server, and, for  
22 instance, Prebid wouldn't allow us to serve our direct sold  
23 campaigns.

24 Q Is there any other functionality that you would lose if  
25 you replaced DFP entirely with a header bidding wrapper?

1 A Yeah. I mean, the ad server can deal with inventory  
2 management, the hierarchy of the inventory, inventory  
3 forecasting, they give us a user interface, we have  
4 reporting tools, user management, APIs into other systems,  
5 for instance. So there's a lot of functionality which is in  
6 the ad server which doesn't exist within Prebid.

7 Q I mean, what about the ability to create your own  
8 in-house ad serving technology?

9 A Our specialism is producing content and journalism. We  
10 don't specialize in producing sort of enterprise-level  
11 software. So I think not really possible. And even if we  
12 did, we still wouldn't get access to AdX demand, so it  
13 wouldn't be worthwhile.

14 Q And if you did try and attempt to do that, would you  
15 have to rebuild all those features that you listed when we  
16 were talking about Prebid?

17 A Yeah. Yeah. Pretty much.

18 Q So what ability does Daily Mail have to replace its  
19 Open Auction display impressions that it sells through DFP  
20 with selling social media ads instead?

21 A None. It's not possible.

22 Q What ability does Daily Mail have to replace the Open  
23 Auction display impressions it sells through DFP with video  
24 ads instead?

25 A Again, not really possible. Our content is

1 primarily -- while we do produce some video, it's primarily  
2 text, text on a page, and you require display ads around  
3 that.

4 Q And, finally, what ability does Daily Mail have to  
5 replace the Open Auction web display impressions it sells  
6 through DFP with impressions that it's selling through an  
7 app?

8 A Again, not really possible. There are two different  
9 ways to access our website. To put that into context, we  
10 get roughly -- 70 million people in the U.S. each month come  
11 to our website. Our app you would be required to go to an  
12 app store, download the app, and we have less than a million  
13 users in the U.S. today that utilize our app. So we  
14 wouldn't be able to shift 17 million over to the app.

15 Q And so what exchanges does Daily Mail use to sell its  
16 Open Auction display impressions?

17 A We use a few different exchanges. Google AdX is the  
18 largest. Some other examples include PubMatic, Xandr, Index  
19 Exchange, Magnite, TripleLift.

20 Q And how does the amount of impressions transacted  
21 through AdX for Daily Mail compare to the amount of  
22 impressions transacted through those other exchanges?

23 A AdX accounts for significantly more impressions.  
24 Historically, over the last few years, anywhere between 40  
25 to 60 percent of programmatic impressions go through Google

1 AdX, and the next closest competitor is probably more like  
2 6 percent, 7 percent, something like that maybe.

3 Q And so what take rate does Daily Mail pay Google for  
4 the Open Auction impressions sold through AdX?

5 A 20 percent.

6 Q And how does that 20 percent take rate compare to the  
7 take rates that Daily Mail pays other exchanges for Open  
8 Auction transactions?

9 A Typically that's around double. So across some of the  
10 other exchanges I mentioned as well, we have roughly around  
11 a 10 percent take rate. We have a couple of exchanges, one  
12 operating at 7 percent, one operating at 9 percent.

13 Q So why did Daily Mail continue working with AdX if  
14 AdX's take rate was roughly twice that what you were paying  
15 for other exchanges?

16 A Because that's the only way to access AdX demand.

17 Q Are you familiar with the term direct sale in the  
18 context of digital advertising?

19 A Yeah.

20 Q Does Daily Mail make direct sales of web display  
21 impressions?

22 A Yeah, we do. Yep. We've got a sales team.

23 Q And, in brief, what process is required for Daily Mail  
24 to implement a direct sale from start to finish?

25 A It's typically a fairly long process. You require a

1 sales team and the support staff, creative, marketing. You  
2 would need to create sales materials, sell your brand into a  
3 media agency or buyer. You'd need to respond to RFPs. You  
4 would need to, if you win the RFP, on board creative assets  
5 or tags, you need to traffic that in the ad server. You  
6 would need to set up billing and reporting with the buyer.  
7 You'd need to monitor the campaign as it was running. And  
8 then at the end of the campaign, you typically would send a  
9 post-campaign report to explain how the campaign did.

10 Q And what percentage of Daily Mail's display impressions  
11 is Daily Mail able to sell through those direct transactions  
12 you just described?

13 A Of impressions, it's probably roughly globally maybe 10  
14 to 20 percent. A little bit less in the U.S., I guess.

15 Q So if the take rate that Daily Mail paid for Open  
16 Auction transactions increased by a small but significant  
17 amount, what ability would Daily Mail have to shift those  
18 Open Auction sales to direct sales?

19 A Very little. Typically direct sales is higher priced.  
20 So it's higher CPM. So we sell as much as we can direct.  
21 Direct sales and open market programmatic, the way we view  
22 it, they're not really substitutes, and you can't just move  
23 one -- you can't just move Open Auction to -- direct sales  
24 typically serves a different purpose as well. Direct sales  
25 are quite often higher impact ad creatives. The goals of

1 direct sales is more branding; whereas Open Auction, it's  
2 typically standard banners, and the goal is more lower  
3 funnel, sort of direct response marketing.

4 Q And are you familiar with the terms programmatic direct  
5 and programmatic guaranteed?

6 A Yep.

7 Q And what ability would you have to shift Open Auction  
8 transactions to programmatic direct or programmatic  
9 guaranteed?

10 A We class those internally. Basically the same as  
11 direct. So very little.

12 Q I want to ask you about one other term before we move  
13 on.

14 Before this case, how familiar were you with the  
15 term open-web display advertising?

16 A Yeah. I was familiar. Yep.

17 Q And what does that term refer to?

18 A I guess it's got two parts. Open web, which is  
19 typically websites that exist on the Internet outside of the  
20 walled gardens, like Google or Facebook, and may use -- may  
21 rely on display advertising and use third parties to  
22 monetize. And then display refers to a type of advertising,  
23 typically that banner ads exist around content, and they  
24 could have text or images or rich media load inside of them.

25 Q So we'll move onto our next topic and ask you a couple



1 questions about AdX.

2 Are you familiar with the term AdX-direct tags?

3 A Yep.

4 Q What is an AdX-direct tag?

5 A An AdX-direct tag is a tag-based method to access  
6 Google AdX demand, but it is a fairly inefficient way to do  
7 so.

8 THE COURT: I'm sorry. Can you repeat that,  
9 please.

10 THE WITNESS: It's a very inefficient way to do  
11 so.

12 THE COURT: To do what?

13 THE WITNESS: To access AdX demand.

14 THE COURT: All right.

15 BY MR. WOLIN:

16 Q Why do you say it's an inefficient way to access AdX  
17 demand through an AdX-direct tag?

18 A Because when you access AdX through Google's ad server,  
19 AdX will bid the price into the ad server so it can compete  
20 with the other prices in the ad server.

21 When you want to access AdX demand through the  
22 AdX-direct tag, that tag will not give you the price back.  
23 So it will never insert a price into another auction.  
24 Instead, you basically have to tell AdX the price to beat.  
25 So basically you have to give AdX last look because you have

1 to have some pricing guidance within AdX so -- for AdX to  
2 know whether or not it should take the impression.

3 So, A, it kind of replicates last look; and then,  
4 B, tag-based access to AdX in this way is -- would be set up  
5 in a waterfall formation, which, again, is an inefficient  
6 way. You end up with latency issues as well.

7 Q And so would it be feasible for Daily Mail to switch to  
8 another publisher ad server and then replace DFP's access to  
9 AdX with, instead, these AdX-direct tags that you've been  
10 talking about?

11 A Not really.

12 Q And related to that, are you aware of a setup in which  
13 one publisher uses two ad servers, DFP for AdX, and then a  
14 separate publisher ad server for header bidding?

15 MS. RHEE: Your Honor, that lacks foundation.  
16 He's one publisher; he can't speak for all publishers.

17 THE COURT: Speak for just this publisher.

18 THE WITNESS: The --

19 BY MR. WOLIN:

20 Q Are you personally aware of a setup in which one  
21 publisher uses two ad servers?

22 THE COURT: No. No. All right. I'll permit  
23 that, if he knows.

24 THE WITNESS: Yeah. There's example that floats  
25 around of one publisher in Europe, yeah.

1 THE COURT: So there is a publisher in Europe whom  
2 you know who is using two of these servers?

3 THE WITNESS: Yeah. There's one example, yeah.

4 THE COURT: All right.

5 BY MR. WOLIN:

6 Q And that's the only example you're aware of all the  
7 publishers that you're aware of in the industry?

8 MS. RHEE: Leading, Your Honor.

9 THE COURT: That's not leading enough. Overruled.

10 BY MR. WOLIN:

11 Q You may answer.

12 A It's the only example that I personally know of. Yeah.

13 Q I mean, do you believe that that would be a feasible  
14 option for Daily Mail to use this two ad server setup?

15 A No.

16 Q Why not?

17 A A, for the issues that I mentioned earlier around  
18 accessing Google demand through an AdX-direct tag, which  
19 essentially those same issues exist. It's very inefficient  
20 to use two ad servers in this way. And, again, you've got  
21 latency issues, you've got no unified auction, you're giving  
22 last look to Google in this setup. So it wouldn't be really  
23 a feasible way to do -- to set up your ad server.

24 Q So let's then shift a little and talk about some other  
25 aspects of AdX.

1 Are you familiar with the term first look in  
2 connection with AdX and the waterfall?

3 A Yeah.

4 Q Has Daily Mail analyzed how the introduction of header  
5 bidding impacted its revenue in comparison to its revenue in  
6 the time period when AdX had first look?

7 A Yes. So the adoption of client-side header bidding  
8 allowed for essentially the removal of first look for AdX  
9 within the ad server, and it allowed for non-Google  
10 exchanges to compete in a unified auction inside of Google  
11 Ad Manager.

12 You know, we've seen anything from 50 to  
13 100 percent increase in revenue from exchanges when they  
14 move from the waterfall setup to a header bidding setup. So  
15 it's -- it increases publishers' revenues considerably.

16 Q And are you familiar with the term Exchange Bidding in  
17 connection with AdX?

18 A Yes.

19 Q In the time period before Google introduced Exchange  
20 Bidding, were you aware of any way to configure DFP to give  
21 another ad exchange a higher priority than AdX among remnant  
22 line items?

23 A I don't think that was possible, no.

24 Q Are you familiar with sponsorship and standard line  
25 items in DFP?

1 A Yep.

2 Q Would it be possible for Daily Mail to place an ad  
3 exchange in a sponsorship or standard line item and then  
4 solicit a real-time bid from that exchange?

5 A I mean, it's technically possible. We could  
6 technically take a bid from header bidding and run that  
7 through a sponsorship or standard-type line items. But, you  
8 know, it's not really -- in practice, you would never be  
9 able to do that at any great scale.

10 Sponsorship and standard-type line items were  
11 designed for direct sales; they were not designed for  
12 programmatic advertising. Sponsorship-type line items don't  
13 compete on price in the same way that the remnant line items  
14 do. And the standard-type line items are designed for a  
15 direct sales campaign when you have a fixed impression goal  
16 and a fixed flight date for the direct campaign. Which,  
17 again, programmatic Open Auction doesn't really have, you  
18 know, a fixed flight date, it doesn't have a fixed number of  
19 impressions.

20 Q And could you just explain what you mean when you say a  
21 fixed flight date?

22 A Flight date would be sort of the length of the direct  
23 sold campaign. So, you know, some campaigns will run for a  
24 week, two weeks.

25 Q So how did Daily Mail's adoption of header bidding

1 change the impact of ad fraud on Daily Mail?

2 A There's not really any impact, I don't think.

3 Q And how did Daily Mail's adoption of header bidding  
4 change the impact of malware on Daily Mail?

5 A Again, not really any impact.

6 Q And how did Daily Mail's adoption of header bidding  
7 change the impact of latency on Daily Mail?

8 A Again, not really any impact.

9 Q And how did the latency and ad loading that occurred  
10 through header bidding compare to the latency that occurred  
11 in the waterfall setup?

12 A So on header bidding, we have latency controls, so we  
13 can put global timeouts. So we will call our ad server  
14 regardless if some client-side header bidding is returned or  
15 not. So there's not really any significant page load  
16 latency on client-side header bidding.

17 With the waterfall setup, typically you will get  
18 more ad render latency, because if you're trying to reach a  
19 bid from an exchange lowdown in the waterfall, you will have  
20 to waterfall through multiple different servers in order to  
21 find that demand, and that causes your ads to load more  
22 slowly.

23 Q Thank you. I want to shift to a different topic.

24 Are you familiar with the Unified Pricing Rules or  
25 UPR in connection with Google's ad tech products?

1 A Yep.

2 Q And the Court's already heard testimony about UPR, so  
3 we won't go into what it is.

4 But I do want to ask you about the impact of UPR  
5 on Daily Mail. And to do that, let's turn to PTX 1633 in  
6 your binder, please.

7 THE COURT: Any objection to 1633?

8 MS. RHEE: No, Your Honor.

9 THE COURT: All right. It's in.

10 (Plaintiffs' Exhibit Number 1633 admitted into evidence.)

11 BY MR. WOLIN:

12 Q Mr. Wheatland, did you author the email that's shown in  
13 PTX 1633?

14 A Yep. By the looks of it. Yep.

15 Q And one of the recipients that you sent it to was  
16 Richard Caccappolo; is that right?

17 A Yes, that is correct.

18 Q Who is Mr. Caccappolo?

19 A At the time of this email, he was the chief operating  
20 officer of Daily Mail's website.

21 Q And what's his title now?

22 A He's chief executive officer.

23 Q And so the email is dated February 18th, 2020.

24 When was that in relation to the implementation of  
25 UPR?

1 A That was post UPR. So a few months after UPR rolled  
2 out.

3 Q And could you read for the Court the second paragraph  
4 of the email that starts with "general"?

5 A "General trend is that CPM has decreased a lot since  
6 UPR. Revenue is up, but that's largely a function of  
7 traffic. Revenue percentage share is almost stationary  
8 since UPR, but the impression percentage share has increased  
9 from 20 percent to 60 percent. A huge increase. AdX is  
10 monetizing roughly 3X the amount of our inventory post UPR,  
11 but we don't see much change in revenue. So most of this is  
12 coming from low CPM inventory after the floors were taken  
13 out."

14 Q And Mr. Wheatland, is that statement that you just  
15 read, including that AdX was monetizing roughly three times  
16 the amount of your inventory after UPR, is that an accurate  
17 description of the impact that Daily Mail measured of UPR as  
18 of February 2020?

19 A Yep, I think that's accurate.

20 Q And could you explain the impact of UPR as -- that you  
21 measured in this email which you just read out?

22 A So here we essentially saw that we didn't -- AdX  
23 revenue didn't increase, but they took three times the  
24 amount of inventory at much lower prices. And I think this  
25 was a reflection of the change from the previous pricing



1 rules to Unified Pricing Rules where flooring strategies  
2 prior to UPR were I guess removed or disabled when UPR got  
3 rolled out.

4 THE COURT: So just so I understand that  
5 completely.

6 So you're saying that more of your inventory was  
7 sold but at a lower price?

8 THE WITNESS: Correct. More inventory was sold to  
9 AdX but at a much lower price.

10 THE COURT: But that overall, there hasn't been a  
11 huge impact on your overall revenue?

12 THE WITNESS: Yeah. Revenues were pretty much  
13 stationary.

14 THE COURT: Is that because of the quantity?

15 THE WITNESS: Yeah. That's because the CPM that  
16 AdX took decreased significantly, and then the volume sort  
17 of increased considerably, and then sort of it netted out  
18 where there was no change in revenue.

19 THE COURT: Okay.

20 BY MR. WOLIN:

21 Q Just looking at the language that the percentage share  
22 has increased from 20 to 60 percent, what is that impression  
23 share that you're referring to there?

24 A That's the impression share that Google AdX was winning  
25 of our inventory.

1 Q And where was there a corresponding decrease in  
2 percentage share of impressions, from what source?

3 A So there would have been a decrease from non-Google, so  
4 from the other exchanges. Yep.

5 Q So overall, what has the impact been on Daily Mail of  
6 Google's introduction of UPR?

7 A I mean, UPR has stopped our ability to set floors as we  
8 would like, and it's stopped our ability to optimize our  
9 inventory and better decide how our inventory flows to  
10 different exchanges.

11 Q Okay. So you could put the binder aside, but I do have  
12 one or two additional questions on UPR. And I won't get  
13 into any specifics, but I want to ask you, did you attend a  
14 meeting in April 2019 with representatives of Google where  
15 the Unified Pricing Rules were announced?

16 A Yeah.

17 MR. WOLIN: And, Your Honor, I'll note for a  
18 record that a transcript of the recording of that meeting  
19 was entered into evidence last week as PTX 1854.

20 THE COURT: All right.

21 BY MR. WOLIN:

22 Q And just one question about the meeting, Mr. Wheatland.

23 What did you observe at that meeting about the  
24 reaction to Google's announcement of UPR?

25 A Publishers were unhappy.

1 Q And what ability did Daily Mail have to switch away  
2 from DFP in response to Google implementing the Unified  
3 Pricing Rules?

4 MS. RHEE: Your Honor, I think this has already  
5 been covered.

6 THE COURT: Well, not for this particular -- I'm  
7 going to permit it, and then we're going to break for lunch.  
8 Last question.

9 THE WITNESS: Very little. We would still rely on  
10 Google AdX demand, and the calculation that we did earlier  
11 that would still stand. We'll loss 25 to 30 percent of our  
12 programmatic revenue.

13 THE COURT: All right. Does that complete the  
14 direct?

15 MR. WOLIN: No. We have a few additional  
16 questions.

17 THE COURT: We'll finish them after lunch.

18 MR. WOLIN: Thank you, Your Honor.

19 THE COURT: We'll be in recess until 2:00.

20 (Court recessed for lunch at 1:00 p.m.)

21 AFTERNOON SESSION 2:00 p.m.

22 MR. WOLIN: May I proceed, Your Honor?

23 THE COURT: Yes, sir.

24 BY MR. WOLIN:

25 Q Mr. Wheatland, before we broke for lunch, we were

1 speaking about UPR; do you recall that?

2 A Yep.

3 Q Is it possible for Daily Mail to increase or inflate  
4 the bids that it receives from header bidding before they're  
5 submitted into DFP as a work-around for the UPR?

6 A Yeah. That is technically possible, yep. Yep.

7 Q Are there downsides to that work-around?

8 A Yeah. There's a number of downsides.

9 So if you wanted to inflate the client-side header  
10 bidding bid before you submit them into the ad server, you'd  
11 need to have some kind of logic run on the page to determine  
12 how much you should inflate each bid by, which can get quite  
13 complex. Plus, the bids that you'd then be putting into the  
14 ad server would actually be sort of incorrect. So,  
15 therefore, when you're looking at the reporting that can  
16 come out of the ad server, the reporting would not be  
17 accurate, so you wouldn't be able to use it for tracking  
18 revenue, for instance.

19 Q And has Daily Mail ever implemented that bid inflation  
20 work-around?

21 A We've not implemented bid inflation from the page.

22 Q And why not?

23 A For the reasons I outlined. It's quite -- it's  
24 technically difficult, plus it's, you know, operationally  
25 difficult with reporting.

1 Q And does UPR prevent Daily Mail from setting a higher  
2 floor for other exchanges than it does for AdX?

3 A We can still floor in other exchanges. Like, typically  
4 flooring is an exchange functionality, and that's still the  
5 case. So we can floor other exchanges higher using their  
6 floors and their exchanges.

7 Q But you can't give them lower floors?

8 A Correct. Yeah.

9 Q So I want to move on to one final set of questions,  
10 Mr. Wheatland.

11 So you discussed earlier that Daily Mail has been  
12 a customer of Google's DFP and Google's AdX for at least the  
13 past 12 years; right?

14 A Correct. Yeah.

15 Q How responsive has Google been to the requests of Daily  
16 Mail, Google's customer?

17 A Not very responsive in many cases.

18 Q And, in your view, has Google operated DFP and AdX in  
19 ways that are in the best interests of Daily Mail, Google's  
20 customer?

21 A No.

22 Q Why do you believe that?

23 A Because there are functionality and features that are  
24 built inside the ad server that publishers sort of didn't  
25 ask for and are not maximizing publisher revenue.

1 Q And has Daily Mail filed a lawsuit against Google  
2 related to how Google operates DFP and AdX?

3 A Yes.

4 Q So we spoke today about AdX demand not being able  
5 except through DFP.

6 Is that still in effect for Daily Mail today?

7 A Yep. That's still in effect today.

8 Q And how does that affect Daily Mail's business today?

9 A As we discussed earlier, that's still in place today,  
10 so the -- our ability to move ad servers would mean that we  
11 would have to forgo that revenue. So it's not financially  
12 feasible to move ad servers and forgo AdX revenue.

13 Q And what about UPR, is that still in effect for Daily  
14 Mail today?

15 A Yes.

16 Q How does that affect Daily Mail's business today?

17 A That stops us flooring by exchange as we want to, and  
18 it stops us being able to price our inventory to different  
19 buyers as we want to.

20 Q And Mr. Wheatland, why has Daily Mail continued using  
21 DFP as its publisher ad server in spite of Google  
22 implementing features like UPR that you said Daily Mail did  
23 not think was in their best interest?

24 A Because losing AdX would be financially detrimental to  
25 us.

1 Q And what overall impact has that had on Daily Mail as a  
2 news publisher?

3 A I mean, we were a news publisher that produces content  
4 that we believe Americans find important, interesting, and  
5 the majority of our revenue is generated from display  
6 advertising, which run through Google's systems. So Google  
7 suppressing prices for publisher inventory lowers publisher  
8 revenue, which, in turn, means that we cannot invest in  
9 journalism in the way that we potentially otherwise could.

10 You know, we see that there are new verticals that  
11 we aim to move into, especially in the U.S. market. And  
12 actually fairly recently, we had -- unfortunately had a  
13 round of layoffs across U.S. editorial. So it's challenging  
14 to be a news publisher.

15 Q So, Mr. Wheatland, for the topics that we discussed  
16 today about DFP and AdX, did they affect Daily Mail's  
17 business today or for Daily Mail were they just in the past?

18 A Today.

19 MR. WOLIN: No further -- or we pass the witness,  
20 Your Honor.

21 THE COURT: All right. Ms. Rhee.

22 MS. RHEE: Thank you, Your Honor.

23 And while Ms. Mouser is passing the binders, if I  
24 could just introduce Ms. Amy Mauser back with the Court.

25 Thank you.

1 THE COURT: Go ahead.

2 CROSS-EXAMINATION

3 BY MS. RHEE:

4 Q Good afternoon, Mr. Wheatland.

5 A Good afternoon.

6 Q My name is Jeannie Rhee. I represent Google. I'll be  
7 asking you some questions today; okay?

8 A Okay.

9 Q If I could just have you keep your voice up and maybe  
10 speak a little bit slowly.

11 A Yes. Of course.

12 Q Because as lovely as your accent is, I just want to  
13 make sure I can understand you.

14 A Yeah. Absolutely.

15 Q Now, the Daily Mail is a UK publication that now is  
16 provided globally; is that right?

17 A Our print operation is in the UK, but our website is a  
18 global offering. And we actually have a larger readership  
19 in the U.S. than we do in the UK now.

20 Q Okay. But you have globally, I think your testimony  
21 was 170 million users; is that right?

22 A Globally. It can vary month to month, but around that  
23 number, yes.

24 Q Well, in your direct examination, you didn't qualify  
25 it. I think your testimony was 170 million users worldwide,



1 or you said globally; correct?

2 A Correct.

3 Q And 70 million of those users get the Daily Mail  
4 digitally, and that's in the U.S.; is that right?

5 A Correct.

6 Q Okay. Now, you, yourself, just moved to the United  
7 States in the past two years; is that right?

8 A No. I used to live here prior, but I moved back here.

9 Q And by "moved back," that is you moved back to the UK?

10 A I moved back to the U.S. I moved to the US in 2014.

11 Q Okay. Now, the Daily Mail is referred to as a British  
12 tabloid, you're familiar with that; right?

13 MR. WOLIN: Objection.

14 THE COURT: I don't know why any of this is  
15 relevant at this point. I want this more focused.

16 Objection sustained.

17 BY MS. RHEE:

18 Q Now, you talked about the Daily Mail, particularly in  
19 the U.S. market, moving to new verticals; is that right?

20 That was just your testimony a few minutes ago.

21 A Correct.

22 Q And that includes video; right?

23 A Video's not a specific content vertical.

24 Q And, in fact, The Daily Mail has publicized about its  
25 unveiling of a new global video strategy; right?

1 A I believe we have.

2 Q Okay. And The Daily Mail offers its content and  
3 publicizes its offering of content on social media; correct?

4 A Correct.

5 Q And, in fact, it publicizes that The Daily Mail is  
6 available on X; right? Formerly Twitter.

7 A We may do.

8 (Reporter interrupted for clarification.)

9 THE WITNESS: We may do. Yeah. I'm not entirely  
10 sure. We may do.

11 MS. RHEE: I'm now going to pull up what's going  
12 to be marked as Wheatland Demonstrative 1, Your Honor, which  
13 is from The Daily Mail website that Mr. Wheatland talked  
14 about on direct examination.

15 BY MS. RHEE:

16 Q Mr. Wheatland, do you see the -- actually, you can see  
17 it both in the book, but it might be easier to follow on the  
18 screen.

19 Do you see that?

20 A Could I find it in the book as well?

21 Q It's Tab 3.

22 A Tab 3.

23 Q And you see this is pulled down from  
24 thedailymail.co.uk; do you see that?

25 A Okay.

1 Q Now, it says: "Daily Mail is available on multiple  
2 social media platforms"; do you see that?

3 A Yeah.

4 Q Okay. And it says, as you scroll down, how you can get  
5 The Daily Mail on Twitter, The Daily Mail on TikTok, and, in  
6 fact, it says that "The Daily Mail has become the biggest  
7 news publisher on TikTok"; do you see that?

8 A I see that written, yeah.

9 Q And it surpassed 10 million followers on that platform;  
10 correct?

11 A Yeah, I see that written here.

12 Q Okay. And then it goes on to talk about how The Daily  
13 Mail is available on Instagram?

14 MS. RHEE: Yep. If we can keep going down.

15 THE WITNESS: Yeah.

16 BY MS. RHEE:

17 Q And it says: "Our most popular stories will be  
18 published to the Daily Mail's Facebook page, which you can  
19 follow here"; right? Yes?

20 A I see that's written here, yes.

21 Q Okay. And then The Daily Mail is available on  
22 Snapchat; do you see that?

23 A I see it's written here.

24 Q And it says the Snapchat is "the home of all of our top  
25 picture, photo, and video-related content. Follow The Daily

1 Mail here"; do you see that?

2 A Uh-huh. Yes, I see that.

3 Q Okay. And the reason why The Daily Mail publicizes  
4 itself and actually makes so much of its content available  
5 on all of these different social media platforms is because  
6 that's where the users are; right?

7 MR. WOLIN: Objection. Foundation.

8 THE COURT: Overruled. Can you answer that  
9 question?

10 THE WITNESS: Some readers can access content that  
11 we put onto social media.

12 BY MS. RHEE:

13 Q And that's the reason why you publicize on your website  
14 the fact that you can find The Daily Mail and all of its  
15 content on all of these various social media sites; correct?

16 A We don't publish all of our content onto social media.

17 Q You publish the top photos; correct?

18 A That's -- I think they are the words written here.

19 Q And the top video; right?

20 A We publish some content.

21 Q Yes or no?

22 A We publish some content onto social media.

23 Q And your top --

24 THE COURT: Wait. Wait. Wait. Wait. Let him at  
25 least finish. All right.

1 BY MS. RHEE:

2 Q Can you finish the yes-or-no question?

3 A We publish some content onto social media.

4 Q And that's the top pictures, the top photos and the top  
5 video content; yes?

6 A I don't know how we're -- I don't know.

7 Q And it includes your most popular articles; right? We  
8 just saw that on the Instagram disclosure?

9 A Again, we publish some content onto social media.

10 I think --

11 Q It says on your website you feature your top stories on  
12 your Instagram page; correct?

13 A Yeah. There's a difference between --

14 Q Okay. There's no other question. Okay.

15 THE COURT: You do need to listen to the question.  
16 If it just calls for a yes-or-no -- it's up to other counsel  
17 on redirect to expand if they feel that's necessary; all  
18 right?

19 THE WITNESS: Okay. Okay.

20 BY MS. RHEE:

21 Q Now, on direct examination, you told the government  
22 lawyer and this Court, that The Daily Mail is -- and I  
23 believe the words were -- "one of the largest  
24 English-speaking newspapers in the world"; is that right?

25 A The website, correct. Yes.

1 Q And then you went on to talk about The Daily Mail's  
2 take rate that it pays to AdX versus other exchanges;  
3 correct?

4 A Yes.

5 Q Okay. Now, that is based on individual negotiations  
6 that you or somebody else on your team negotiated with each  
7 one of the exchanges; correct? Yes or no?

8 A Correct.

9 Q Now, that's from your vantage point and your position  
10 as one of the largest publications around the world; right?  
11 You can only speak for yourself; right? Again yes-or-no  
12 question.

13 A I know the take rates of -- that Daily Mail has with  
14 exchanges.

15 Q And that's one publication -- one of the largest  
16 publications in the world, according to your testimony;  
17 correct?

18 A Correct.

19 Q Okay. Now, you talked on your direct examination with  
20 the government attorney about direct deals; do you remember  
21 that?

22 A Yes.

23 Q And, in fact, The Daily Mail has a new focus and  
24 priority of doing direct deals and direct partnerships with  
25 advertisers; correct?

1 A I'm not sure what that relates to.

2 Q Well, very recently, a very senior executive spoke to  
3 an ad exchanger publication, which is an industry  
4 publication, talking about how, for The Daily Mail, you want  
5 to focus particularly on working directly with brands;  
6 correct?

7 MR. WOLIN: Objection. Hearsay.

8 THE COURT: The same thing can be asked -- is  
9 there a preference for direct communication with  
10 advertisers?

11 THE WITNESS: There is a preference to sell  
12 advertising directly because we can get higher prices.

13 MS. RHEE: Thank you so much, Your Honor, and then  
14 I'll move on. That's the only point I wanted to get across.

15 THE COURT: I will tell you, the leading questions  
16 are starting to really drive me crazy. If we had had a jury  
17 trial, both sides would have been cut dramatically.

18 I want few less leading questions. They're too  
19 long. It's the attorneys who are trying to testify in this  
20 case. I mean, I can see the difference, but I really don't  
21 like it, and it's lengthening the trial. We don't need a  
22 lot of preambles. On direct you said such-and-such, you  
23 don't need that. I heard it. Okay.

24 I want both sides to try to get this a bit more  
25 precise. All right. So move on.

1 BY MS. RHEE:

2 Q Direct tags. AdX direct tags, do you remember talking  
3 about it?

4 A (Gesturing affirmatively.)

5 Q Okay. And it is available to you; right? You, as the  
6 Daily Mail, choose not to use it?

7 A It's available for us to generate an AdX direct tag if  
8 we wanted to.

9 Q Okay. And then similarly, you were asked about the  
10 ability to submit bids that are higher than the actual  
11 header winning bid; yes?

12 A We spoke around bid multiplication from header bidding  
13 bids on the page.

14 Q Okay. And is it possible for The Daily Mail to do  
15 that?

16 A As I mentioned, it's technically possible.

17 Q So is that a yes?

18 A It's technically possible.

19 Q Okay. And The Daily Mail chooses not to do that; is  
20 that right?

21 A To the extent that we're not doing it, it's technically  
22 possible. We don't do it, so to that extent, I guess yes.

23 Q Okay. And then in terms of being able to integrate  
24 header bidding into DFP, is it possible, technically  
25 possible, to go ahead and do that?



1 A It's technically possible to run client-side header  
2 bidding bids as line items in the ad server.

3 Q Okay.

4 A Although it's not set up.

5 Q Okay. And then is it that The Daily Mail chooses not  
6 to do that?

7 A Sorry. Could you repeat the question? Is it  
8 technically possible to set up header bidding in the ad  
9 server? Is that your question?

10 Q Correct. Yes.

11 A We run client-side header bidding bids inside the ad  
12 server.

13 Q Okay. So the answer is, yes, it's technically  
14 possible; and, yes, The Daily Mail does it?

15 A Correct. Yes.

16 Q Okay. Thank you for the clarification, Mr. Wheatland.

17 Now, you talked about what's been moved into  
18 evidence as PTX 1717.

19 MS. RHEE: If we could pull that up. Thank you.

20 BY MS. RHEE:

21 Q And let's actually just walk through this. And that's  
22 the first slide, I believe you were shown, ending 644; do  
23 you see that in front of you?

24 A Yes.

25 Q The title of the slide is "How Much AdX Demand Is

1 Unique"; is that right?

2 A Yeah, that's correct.

3 Q Okay. And the revenue numbers, is that in pounds, not  
4 dollars? I just want to understand.

5 A That's in pounds.

6 Q Okay. And now when you see the bottom line here which  
7 is percentage of AdX revenue, Mr. Wheatland, is that the  
8 percentage of AdX revenue that the Daily Mail deemed based  
9 upon this review as being unique?

10 A There's different interpretations of the word "unique."  
11 In this instance, on this slide, we're referring  
12 specifically to when there's a bid from AdX, but there's not  
13 a bid from another exchange, but I would also -- I could  
14 also class- --

15 Q Mr. Wheatland, the question is: Based on this slide  
16 and based on how you defined unique, have I read the last  
17 row correctly? Is it that 18 percent of what you saw coming  
18 in from AdX what you deemed to be unique?

19 A I don't agree with that.

20 THE COURT: What do you mean by the word "unique"?

21 THE WITNESS: So on this slide we're saying that  
22 there's a bid from AdX, but there's no bid from other  
23 demand.

24 THE COURT: Right.

25 THE WITNESS: So then we would say that

1 100 percent of AdX's revenue in that instance was sort of  
2 unique.

3 And then on the next slide, we talk about the  
4 incrementality of AdX revenue over non-AdX revenue. And  
5 summing those together, which we do on the last slide, we  
6 actually use the word unique again, and we say the 219,  
7 which is the summation of those two numbers, we would say  
8 are sort of the unique AdX demand.

9 THE COURT: That's AdX by itself, alone, with  
10 nobody else?

11 THE WITNESS: That's AdX by itself, alone. Yeah.

12 THE COURT: Okay. Got it.

13 MS. RHEE: So thank you for that clarification.

14 BY MS. RHEE:

15 Q But I just think I want to try to understand going back  
16 to 644.

17 What does 18 percent represent here?

18 A That simply represents the percentage of AdX revenue  
19 when there is no other bid from a non-Google exchange.

20 Q Okay. So I just, again, want to make sure I understand  
21 this.

22 That 18 percent represents where there is an  
23 impression that comes in from AdX that you did not see from  
24 another demand source?

25 A I don't think that's correct. I don't understand that.

1 Q Okay. I think I'm confused then.

2 Now, in the summary that you have at the end of  
3 this slide, and it's titled "MailOnline UK Revenue At Risk  
4 If We Pull AdX."

5 First, why is it UK revenue here, Mr. Wheatland?

6 A Because we just -- we knew that the trends are  
7 essentially the same in the UK and the US. And the analysis  
8 was just run on UK data.

9 Q Okay. So you ran this just on the UK data and not the  
10 US data; is that right?

11 A The trends are the same in both regions, but that's  
12 correct, yes.

13 Q So the answer is yes?

14 A Yes.

15 Q Okay. And then I believe your testimony was, bottom  
16 line, your assessment was you would take a 28 percent  
17 revenue hit if you chose to move your business away from  
18 AdX; is that right?

19 A Across -- across programmatic, yeah.

20 Q Okay. So this is just limited to programmatic?

21 A This is -- yeah. This is programmatic revenue.

22 Q Okay. And then I want to understand the breakdown  
23 here, because there's first a number that is 219K in pounds;  
24 is that right?

25 A Correct.

1 Q Okay. And does that number represent the revenue hit  
2 just from what you deemed to be AdX unique demand?

3 A There's different definitions of the word unique. I  
4 think outside of this document when someone's referring to  
5 unique AdX demand, typically they're referring to Google  
6 revenue and maybe, to a lesser extent, DV360 revenue.

7 In this document, we were -- so to unique demand,  
8 being either there was no bid from a non-Google exchange, or  
9 it was the difference between the non-Google exchange bid or  
10 the paid price from Google AdX.

11 Q Okay. And that's how -- I mean, this document belongs  
12 to the Daily Mail; right?

13 A Correct.

14 Q And that's how The Daily Mail chose to define unique  
15 demand?

16 A In this document, in this context.

17 Q Okay. And then the next line, which has an even higher  
18 figure, which is 355K a month in pounds, does that represent  
19 at least The Daily Mail's assessment about what happens if  
20 you moved away from AdX and it's what the other players  
21 would do?

22 A That 355 is the 219 plus the bid-shading impact across  
23 the non-Google exchanges without Google's price support in  
24 the auction.

25 Q Okay. And so, in other words -- and, sorry, I

1 apologize that it's really an added figure.

2 A Correct.

3 Q But there's some amount in terms of your revenue  
4 assessment about what other exchanges would do in the  
5 absence of AdX; is that right?

6 A Correct.

7 Q Okay. And it's those two things combined that led to  
8 the ultimate assessment about a 28 percent revenue hit; is  
9 that right?

10 A Correct. Yeah.

11 Q All right. And I believe you testified repeatedly on  
12 direct examination, it was that revenue hit that you  
13 assessed to be the driver of why Daily Mail chose not to go  
14 with another ad server; is that right?

15 A The lost revenue is the primary reason, yes.

16 Q Okay. And now in terms of that choice, you testified  
17 on direct examination that there were at least two different  
18 ad servers that you were thinking about at that time; is  
19 that right?

20 A Yes. Yep.

21 Q Okay. And one was Smart AdServer; correct?

22 A Correct.

23 Q And the other one was Xandr; is that right?

24 A Correct.

25 Q All right. Now, you know that Xandr was formerly

1 called AppNexus; yes?

2 A Correct.

3 Q And that AppNexus/Xandr, whatever you want to call it  
4 now, has been acquired by Microsoft; yes?

5 A Correct.

6 Q Okay. So one of the competitor offerings with respect  
7 to a publisher ad server that you were thinking about was a  
8 Microsoft product?

9 A Xandr -- I think -- I'd have to check the exact timing.  
10 Xandr was either owned by AT&T or Microsoft at that point.  
11 I can't remember.

12 Q Okay. Whichever corporate entity owned it, you chose  
13 not to go with it?

14 A Correct. Yeah.

15 Q Okay. And then you were also asked about UPR; do you  
16 remember that?

17 A (Gesturing affirmatively.)

18 Q Okay. So now I want to direct your attention to what  
19 is now in your binder as Tab 6, I believe.

20 MS. RHEE: And at this time, we would like to  
21 offer it into evidence.

22 MR. WOLIN: Objection, Your Honor.

23 THE COURT: Hold on a second.

24 This does not have a defense number on it.

25 MS. RHEE: No, Your Honor. This is --

1 MR. WOLIN: It's hearsay as well.

2 MS. RHEE: I believe the exact same emails by  
3 Mr. Wheatland have been introduced already in the direct  
4 examination.

5 THE COURT: I think that's correct, so I'm letting  
6 it in.

7 What number are we putting on it?

8 MS. RHEE: We're going to label this DTX 2530,  
9 just to be safe. Yes.

10 THE COURT: 2530?

11 MS. RHEE: Yes, Your Honor.

12 THE COURT: All right. It's in.

13 (Defense Exhibit Number 2530 admitted into evidence.)

14 BY MS. RHEE:

15 Q Mr. Wheatland, you see this email exchange from  
16 December of 2018 in front of you; correct?

17 A Yeah, I see that.

18 Q So let's start at the bottom, and it's from one of --  
19 one of what may be an account representative at Google; is  
20 that right?

21 A Dmitry?

22 Q Yes.

23 A Yes.

24 Q Okay. Who is Dmitry?

25 A He was one of our -- I don't remember his exact title.



1 One of our account managers or someone working on our  
2 account at Google.

3 Q Okay. And that is an email from October of 2018  
4 addressed to you and others at The Daily Mail; yes?

5 A Yeah, I see that.

6 Q Okay. And the title of this is called "Unified EB  
7 Pricing Rules - Alpha."

8 A Yeah. I see that. Yeah.

9 Q Okay. And then if you have a chance to read through  
10 it, do you see -- and if you can remember, that's even  
11 better -- that you were offered by Google an opportunity to  
12 alpha test UPR; do you remember that?

13 MR. WOLIN: Objection, Your Honor. This is not  
14 Daily Mail's statements; it's a statement by Google, so I  
15 renew the objection.

16 THE COURT: Overruled.

17 THE WITNESS: So this is -- just looking at it,  
18 this is October 2018.

19 BY MS. RHEE:

20 Q Correct.

21 A Which is long before Google introduced the  
22 functionality of UPR as it was when it was rolled out.

23 Q I totally agree.

24 A And this is, I think, just Exchange Bidding. UPR for  
25 Exchange Bidding.

1 Q I just want to see if you remember this because this is  
2 the email that was sent to you.

3 In October of 2018, do you recall that you were  
4 offered -- you, The Daily Mail, were offered the opportunity  
5 to alpha test --

6 THE COURT: Ms. Rhee, that's a long question.

7 The direct question is: Do you recall ever being  
8 offered the opportunity to participate in an alpha test of  
9 the Unified Pricing Rules?

10 THE WITNESS: I don't actually recall it, but I  
11 guess they reached out in email here, but I don't recall.

12 BY MS. RHEE:

13 Q Okay. Let's actually keep going up the chain to see if  
14 this refreshes recollection.

15 You see that there's a response from you dated  
16 October 24th of 2018 to Dmitry?

17 A Yeah.

18 Q And what do you say in response?

19 A I say: "Yes, this looks interesting. Would love to  
20 test and happy to give feedback."

21 Q Okay. And then does Dmitry then write back? Do you  
22 see that?

23 A Yeah, I see that.

24 Q Okay. Then he follows up, and I think there are more  
25 people from both Google and perhaps The Daily Mail.

1                   What do you see there as of December 6th, 2018?

2       A       Someone is saying "thanks for including us into the  
3       alpha. We'll play around with it on our end and flag if we  
4       have any questions."

5       Q       Okay. And are you reading Mr. Gan's response?

6       A       Yes.

7                   MS. RHEE: If we could pull that up.

8       BY MS. RHEE:

9       Q       Who is Mr. Gan?

10      A       Someone who works on the team at Daily Mail. He's  
11      someone that works on my team at Daily Mail.

12      Q       He's on your team?

13      A       Yes.

14      Q       And do you have any reason to doubt that you actually  
15      took Google up on the opportunity to participate in this  
16      alpha test?

17      A       I can't remember if we did or didn't.

18      Q       Okay. But you don't have any reason to question the  
19      email exchange that you participated in?

20      A       I could see it written here, yeah. I can't remember if  
21      we did.

22      Q       Okay. And then after The Daily Mail alpha tested UPR,  
23      did Google request feedback from The Daily Mail?

24      A       I can't remember.

25      Q       Okay. So let's actually direct your attention to

1 what's behind your binder in Tab 7. And --

2 MS. RHEE: And, Your Honor, at this time we would  
3 offer that into evidence as well and mark it DTX 2531.

4 MR. WOLIN: We object, Your Honor. This was never  
5 disclosed on the exhibit list.

6 THE COURT: Well, that's a different objection,  
7 and that's more legitimate. All right. Just ask the  
8 questions of the witness.

9 MS. RHEE: Okay.

10 BY MS. RHEE:

11 Q You see, Mr. Wheatland, that you are on this email and  
12 you write in?

13 A Yeah, I can see.

14 MS. RHEE: Okay. At this time, Your Honor, we  
15 would seek to introduce this into evidence.

16 THE COURT: No. No. No.

17 MR. WOLIN: Objection.

18 THE COURT: Ask the substantive question and see  
19 if the answer can come forward that you're looking for. If  
20 it doesn't, you can use it to refresh his memory, but that's  
21 it. It's not coming in.

22 BY MS. RHEE:

23 Q You remember being asked -- or The Daily Mail being  
24 asked about providing a quote for a Google blog post on the  
25 Unified Pricing Rules?

1 A Google asked us to assist them and provide a -- or  
2 agree to a quote regarding both first-price auction and  
3 Unified Pricing Rules.

4 Q Okay. And thank you for that clarification.

5 And did The Daily Mail actually approve a quote  
6 for Google's use with respect to both the first-price  
7 auction and the Unified Pricing Rules?

8 A We ultimately approved a quote. I think it's different  
9 to this quote listed here, and we sort of I guess hedged and  
10 watered it down a little bit more because it was before any  
11 of this rolled out, so we weren't actually sure how -- what  
12 the impact would be from the rollout.

13 Q Okay. So when you wrote here "the wording below seems  
14 okay to me," did you mean it?

15 A I remember speaking after this email thread to Rich  
16 about this topic. And as I say, we ultimately decided to, I  
17 guess, water down this quote and say it has -- I think we  
18 used the word like the possibility to increase transparency.  
19 Something like that.

20 Q Well, when you look at this email -- and hopefully it  
21 refreshes recollection -- you see there's a very specific  
22 quote that is teed up for senior executives' approval,  
23 including you, and you weigh in "that wording seems okay to  
24 me"; do you see that?

25 A I see that's written here, yeah.

1 Q Okay. And that quote that you approved by saying "the  
2 wording looks okay to me," does not include the word  
3 "possibility"; right?

4 A I don't agree. I approved to it. I mean, I wrote  
5 these words, but there was conversations that continued  
6 after this email thread.

7 Q Well, let's now turn to DTX 714 --

8 MS. RHEE: Which is already admitted into  
9 evidence, Your Honor.

10 BY MS. RHEE:

11 Q -- and you see, if you move into the second page of  
12 this Google blog post about an update on UPR and first-price  
13 auctions, that very quote that you were talking about in  
14 your email thread here reflected on the Google blog post;  
15 correct?

16 A I think it's -- is it a slightly different quote?

17 Q Well, you can take a look.

18 A Yeah. It's a slightly different quote.

19 Q Okay. And the slight difference is "an opportunity" is  
20 inserted in the final quote?

21 A I mean, it is a different quote. There is a word, "it  
22 gives an opportunity."

23 Q Okay.

24 MR. WOLIN: Objection, Your Honor. We don't have  
25 this in our records as an admitted exhibit, despite Google's

1 communication that it was.

2 MS. RHEE: I believed it was, Your Honor, with  
3 respect to Mr. Srinivasan.

4 THE COURT: Hold on. Which witness do you think  
5 it came in through?

6 MS. RHEE: Mr. Srinivasan.

7 MS. WOOD: And the number is?

8 MS. RHEE: DTX 714.

9 MS. WOOD: Your Honor, I conducted the Srinivasan  
10 examination. I don't have it in my notes from that  
11 examination.

12 MS. RHEE: At least my understanding, and I  
13 apologize, Your Honor, if we've got inaccurate notes, but I  
14 believe that it came in through the cross-examination of  
15 Mr. Srinivasan.

16 THE COURT: What do you have, Katie?

17 THE DEPUTY CLERK: I don't have it.

18 THE COURT: We don't seem to have a record of it.

19 MS. RHEE: Then I will move on, Your Honor.

20 BY MS. RHEE:

21 Q Now, The Daily Mail uses the Amazon wrapper to engage  
22 in header bidding?

23 A We utilize Amazon Transparent Ad Marketplace.

24 Q So yes?

25 A Yeah. That's one of their server-side wrapper

1 solutions.

2 Q Okay. And The Daily Mail uses Google's Open Bidding?

3 A Correct. Yeah.

4 Q And does The Daily Mail also use Prebid?

5 A Correct.

6 Q And are there any other header wrappers that The Daily  
7 Mail uses?

8 A They're the three -- they're the three main ones.

9 Q And do you recall whether or not there were internal  
10 discussions about moving more demand -- or more header  
11 bidding demand through Open Bidding and Amazon in comparison  
12 to Prebid?

13 A I think we had discussions around moving some  
14 client-side header bidding to server-side header bidding,  
15 but we found that, in general, client-side header bidding  
16 makes more revenue.

17 Q And was that despite the fact that the client sider --  
18 client-side header bidding creates latency load issues?

19 A I don't agree that it creates latency load issues at  
20 the moment.

21 Q If I could direct your attention to what's marked as  
22 Tab 13 in your binder, Mr. Wheatland. Let's see if this  
23 refreshes your recollection.

24 Do you see here this is an email from you dated  
25 May 11th, 2017 at the bottom there on the first page?

176



1 A Yeah.

2 Q You see here -- why don't you read it with respect to  
3 "making the correct decision."

4 A Which part would you like me to read?

5 Q The last sentence here about "making the correct  
6 decision to move more demand server-side to create more  
7 price pressure while reducing the scripts loading on page";  
8 do you see that?

9 A Oh, I think this shows is helping us and that we are  
10 making the correct decision to more demand server-side  
11 versus via EBDA or -- to create price pressure while  
12 reducing the scripts loading on page.

13 I see that's written here.

14 Q Okay. So at least as of May 2017, you thought that was  
15 the correct decision; correct?

16 A It was a decision that was discussed by the looks of  
17 it.

18 Q Well, you wrote the words "correct decision"?

19 A I see it written here, yeah, but I don't remember  
20 writing this.

21 Q Okay. Well, it has your name on it; yeah?

22 A Yeah.

23 Q Okay. And then you remember being asked about PTX 1633  
24 on your direct examination.

25 MS. RHEE: And it's already introduced into

1 evidence, so if we could pull that up.

2 BY MS. RHEE:

3 Q Do you see that?

4 A Yeah.

5 Q Okay. And there's a helpful kind of summary slide that  
6 ends in Bates Number 126.

7 MS. RHEE: So if we could go there.

8 BY MS. RHEE:

9 Q You see that in front of you?

10 A Yeah.

11 Q Okay. And it says on the first bullet point, the  
12 observation: "Post UPR MOL saw a modest uptick in ad  
13 revenue percent share"; is that right?

14 A I see that written here.

15 Q Okay. And what is MOL global?

16 A MailOnline, which is another name for Daily Mail.

17 Q Okay. And so even though the revenue may have been  
18 modest, but do I have the assessment right that the post UPR  
19 observation is that revenue was up?

20 A UPR rolled out with the first-price auction change, and  
21 typically when exchange is moved to a first-price auction  
22 model, you do see a bump in revenue in the short term.

23 Plus, I think traffic could have been up over this  
24 time period. There's many reasons why, you know, we may  
25 have seen a modest uptick in AdX revenue percentage share.

1 Q Okay. I just want to make sure, though. Whether it's  
2 modest or not, there was an uptick in revenue?

3 A It says here there was an uptick in revenue, but both  
4 Unified Pricing Rules and first-price auction was rolled out  
5 together.

6 Q Totally understood, and agree with you.

7 But after the rollout of those different features,  
8 did Daily Mail lose money?

9 A We haven't had an increase in revenue from --

10 Q Well, that's not the question.

11 A -- the rollout in UPR.

12 Q That's not the question, Mr. Wheatland.

13 A And the share that went to Google increased  
14 significantly.

15 Q Let me try this again.

16 Mr. Wheatland, did Daily Mail lose revenue after  
17 the rollout of UPR and Unified First Price Auction?

18 A I don't know off the top of my head.

19 Q Okay. And then I want to direct your attention to more  
20 of this email back-and-forth around what the Daily Mail  
21 observed post UPR.

22 And you see there's an email from a Feifan Chen.  
23 Who is Feifan Chen?

24 A Feifan was someone that worked on my team.

25 Q Okay. Reported to you?

1 A Yeah.

2 Q Okay. And you're on this email, you're copied; right?

3 A Yeah.

4 Q And Feifan Chen writes: "The good part of UPR is that  
5 finally Google starts doing 1PA."

6 What is 1PA?

7 A I would understand 1PA to mean first-price auction.

8 Q Okay. "And the test result shows Google's doing an  
9 honest 1PA after UPR which helped our rev"; yeah? You see  
10 that?

11 A I don't know how he's come to that conclusion. I don't  
12 know.

13 Q Okay. But that is the conclusion that he reached, at  
14 least as reported to --

15 A I see Feifan wrote that here, but I don't know beyond  
16 that.

17 Q I just want to understand. At least that's the  
18 conclusion that somebody on your team reached and reported  
19 to who is now the CEO and, to you, his boss?

20 A Yeah, I see it's written there, yeah.

21 Q Okay. And then you talked about on direct examination  
22 having one example of a European publisher who has two ad  
23 servers; do you remember that?

24 A Yeah.

25 Q Who is that publisher?

1 A My understanding is that it's Axel Springer.

2 THE COURT: I'm sorry, what?

3 THE WITNESS: Axel Springer.

4 BY MS. RHEE:

5 Q Axel Springer has a lot of users as well; yeah?

6 A I don't know.

7 Q Now, with respect to the mechanics of UPR, I got a  
8 little confused in the back-and-forth on direct examination,  
9 so I want to see if we can clear this up.

10 When it comes to AdX, DFP and AdX, can you raise  
11 the floor with respect to other exchanges if you are using  
12 DFP AdX?

13 A I don't think you can, no.

14 Q Okay. And so your testimony -- I just want to  
15 understand.

16 A Within the ad server?

17 Q Yeah, within the ad server.

18 A Within the ad server, but within the exchange.  
19 Flooring is typically an exchange feature or technology. So  
20 we can set floors in all of our exchanges, yeah.

21 Q And that's what I wanted to try to clarify.

22 I think what I heard from your testimony, and I  
23 think what I'm hearing you say but want to make sure that  
24 everybody's on the same page is, at least when it comes to  
25 AdX, when AdX is the exchange, you must set a uniform price

1 floor; is that right?

2 A Correct. Yeah.

3 Q Okay. But when it comes to the other exchanges, I  
4 think then you're saying, well, the other exchanges may have  
5 different rules?

6 A You can set higher floors for other exchanges, for  
7 instance, in their exchange user interface. So you can set  
8 higher floors for other exchanges than you can on Google,  
9 but you can't set lower floors for your other exchanges  
10 versus Google.

11 Q Okay. But that's only with respect to the other  
12 exchanges; yeah?

13 A Sorry. I don't understand the question.

14 Q I just want to understand that when it comes to AdX as  
15 the exchange, the rollout of UPR along with the Unified  
16 First Price Auction, was that you needed to have uniformity  
17 with respect to the floor; correct?

18 A So Unified -- Unified Pricing Rules basically moved  
19 Google AdX floors from the exchange level out into the  
20 ad-server level, and just meant that that floor would  
21 encompass all of your remnant or other non-Google demand  
22 sources.

23 Q And when you're testifying about the ability on other  
24 exchanges to have higher or lower floors, that's outside of  
25 DFP; is that right?

1 A We work with a number of exchanges, and in those  
2 exchanges, we can set floors of the exchange level.

3 Q Okay.

4 A But ultimately the ad server runs a finer auction and  
5 decides what gets loaded on the page and at what price.

6 Q Now, finally, you talked about the filing of a lawsuit;  
7 correct?

8 A Correct.

9 Q Okay. And you participated in answering questions  
10 about the tools and their functionality in preparation for  
11 that lawsuit; yes?

12 A I spoke with our lawyers about the functionality of ad  
13 tech.

14 Q Okay. And then did you have an opportunity to review  
15 the complaint?

16 MR. WOLIN: Objection. Relevance.

17 THE COURT: Well, I can't tell. I haven't seen  
18 the complaint, and I don't know where this is going.

19 Do you have a copy of it there you want me to see?

20 MS. RHEE: Yes, Your Honor, and I believe that it  
21 is in Tab -- Court's indulgence -- Tab 9. And, in  
22 particular, Your Honor, paragraphs 34 and 35.

23 THE COURT: All right. So what's the question?

24 BY MS. RHEE:

25 Q Mr. Wheatland, are you aware that in the complaint that

1 The Daily Mail filed with your assistance with respect to  
2 tool functionality, that The Daily Mail views both Google  
3 Ads and DV360 as two DSP offerings?

4 A I did not write any of this. This is our lawyers'  
5 work.

6 Q Well, do you agree with that?

7 A DV360 is a DSP.

8 Q And you see here that in The Daily Mail complaint, that  
9 Google Ads is also referred to as a DSP?

10 A Google Ads is a demand source that operates within AdX.

11 So the way that that connects into AdX is it will  
12 submit a bid into AdX, but there is an ad network component  
13 of Google Ads. So if you're a buyer, you're essentially  
14 buying from an ad network, but it will submit a bid into  
15 Google AdX.

16 Q I don't know if that answers my question.

17 Do you agree or disagree with The Daily Mail  
18 complaint that Google Ads is also a DSP offering?

19 A Google can bid into -- Google Ads can bid into Google  
20 AdX, but typically a DSP will allow the buyer to set their  
21 own sort of parameters and buy campaigns in real time from  
22 an exchange.

23 An ad network will allow -- will on board  
24 campaigns from buyers and sort of run that across port  
25 supply. So I don't know if I 100 percent agree with the



1 definition here that Google Ads is a DSP.

2 Q Okay. So thank you for finally answering -- following  
3 up on the answer.

4 If you don't agree 100 percent that Google Ads is  
5 a DSP offering; do you agree 90 percent?

6 MR. WOLIN: Objection. Relevance. Vague.

7 THE COURT: I'm going to overrule the objection.

8 THE WITNESS: So Google Ads buyers are typically  
9 small- and medium-size buyers, and they will input their --  
10 the campaign will be run by Google Ads. So Google Ads,  
11 itself, is probably closer to an ad network than it is a  
12 DSP, but it can bid into Google AdX. Typically when you  
13 purchase inventory through Google AdWords, you're not  
14 necessarily purchasing on a CPM basis.

15 BY MS. RHEE:

16 Q So I'm not sure if I know the answer to the question.

17 If you don't agree 100 percent that Google Ads is  
18 a DSP offering, do you agree 90 percent?

19 A I don't have an exact percentage to put on it.

20 Q Is it more than 50 percent?

21 A It's -- I mean --

22 Q Yes or no, Mr. Wheatland.

23 A Google Ads I would call an ad network.

24 Q So do you agree 50 percent or no?

25 A So I would call Google Ads an ad network, yeah.

1 Q So you disagree with The Daily Mail complaint that was  
2 filed?

3 MR. WOLIN: Objection. Asked and answered.

4 THE COURT: Now I'm sustaining it.

5 MS. RHEE: No further questions, Your Honor. We  
6 pass this witness back.

7 THE COURT: Okay. Any redirect?

8 REDIRECT EXAMINATION

9 BY MR. WOLIN:

10 Q Mr. Wheatland, just a few questions.

11 Do you recall being asked about the email exchange  
12 where you discussed an alpha test to UPR?

13 A Yeah.

14 Q And at that time, you didn't -- did you know what  
15 impact UPR would have on Daily Mail?

16 A No.

17 Q Does the document that we looked at, PTX 1633, contain  
18 the analysis that you did after UPR was implemented?

19 A No.

20 Q What analysis is in PTX 1633?

21 A This is the analysis when UPR was rolled out and we  
22 could see the impact from UPR after it was rolled out.

23 Q And counsel for Google asked you about a slide that is  
24 on the page with Bates number ending in 126 when she asked  
25 you about the language modest uptick.

1 A Yeah.

2 Q And do you recall that?

3 A Yeah. I see that. Yeah.

4 Q And then on the -- did you testify during -- or what  
5 did you testify about on direct about the reason for that  
6 uptick in revenue?

7 A Google rolled out first-price auctions.

8 MS. RHEE: Your Honor, asked and answered.

9 THE COURT: Yeah. That's not an appropriate  
10 question. Redirect is not to repeat what you said on  
11 direct.

12 MR. WOLIN: Understood.

13 THE COURT: It's meant to correct what came out on  
14 cross.

15 BY MR. WOLIN:

16 Q So you were also asked about this -- the email from  
17 Mr. Chen on the Bates number ending in 124.

18 MR. WOLIN: Could you pull that up, please.

19 MS. RHEE: It's the same exhibit?

20 MR. WOLIN: The same exhibit. If we could have  
21 the next page, Mr. Klein. And we'll go to the paragraph of  
22 the email from Mr. Chen.

23 BY MR. WOLIN:

24 Q And you were asked about the sentence: "The good part  
25 of UPR is that finally Google started doing 1PA"; is that

1 correct?

2 A Yeah. I see that.

3 Q And what does 1PA refer to?

4 A It refers to first-price auction.

5 Q And was that the separate feature from UPR?

6 MS. RHEE: Your Honor, I think this has already  
7 been asked and answered.

8 THE COURT: Sustained.

9 THE WITNESS: First-price auction is --

10 THE COURT: Wait. Wait. There's no question.

11 THE WITNESS: Sorry.

12 THE COURT: Sustained means I've granted the  
13 objection.

14 THE WITNESS: Sorry.

15 BY MR. WOLIN:

16 Q So one of the first topics you were asked about was  
17 Facebook and social media; do you recall that?

18 A Yeah.

19 Q Could Daily Mail uses social media to sell advertising  
20 inventory on its website?

21 MS. RHEE: Your Honor, I think those all have been  
22 asked and answered as well.

23 THE COURT: No, I don't think that's new. I heard  
24 it.

25 MR. WOLIN: Well, this is responding to the cross.

1 THE COURT: But I --

2 MR. WOLIN: I think I asked a separate question.

3 THE COURT: It's getting late in the day and late  
4 in the trial. I've heard this. Okay. His answer. I know  
5 what they said -- what he said.

6 MR. WOLIN: Thank you, Your Honor.

7 THE COURT: Let me ask you a question, and if it  
8 raises an issue that you want to address in redirect, and  
9 you can do it on recross.

10 Does The Daily Mail have video displays on sides  
11 or bottom of its page; do you know?

12 THE WITNESS: We run some video units on the  
13 bottom of our pages. Typically they are sort of now --  
14 there's a gray area between instream versus outstream  
15 advertising, and the definition has changed over time.  
16 Typically instream advertising occurs when you have content  
17 and you will show ads at like -- as like a pre-roll or  
18 linear to the content.

19 Outstream is when there's not any content, per se,  
20 but you're just rendering a video ad. But we do have video  
21 ads on our site.

22 THE COURT: Are they considered display ads or  
23 video ads, or does it depend on what you just said?

24 THE WITNESS: I think it depends. We would --  
25 outstream is sometimes -- outstream video is sometimes

1 referred to as, like, display ads. Because it's basically  
2 just an ad unit, and in that ad unit, you could have text,  
3 you could have image, you could have a little video. And I  
4 think that's kind of separate to proper instream video,  
5 which is sort of primarily across, like, YouTube, streaming  
6 services.

7 We do have some on our side what I would call sort  
8 of proper instream video where we would have, you know,  
9 large player size, large video player size on our article  
10 where the video content is related to the article that  
11 you're reading. So the user will then click play, the sound  
12 will be on, and potentially they'll sit through a pre-roll  
13 video ad before the content starts. But we don't generate  
14 much revenue from that type of instream video.

15 THE COURT: Thank you.

16 MR. WOLIN: Thank you, Your Honor.

17 And thank you, Mr. Wheatland. We have no further  
18 questions.

19 THE COURT: Ms. Rhee.

20 RE-CROSS EXAMINATION

21 BY MS. RHEE:

22 Q Just a quick follow-up from the --

23 MS. RHEE: Thank you, Your Honor.

24 BY MS. RHEE:

25 Q Mr. Wheatland, just a very quick follow-up from the

1 Judge's question.

2 Those pre-roll video ads, Mr. Wheatland, do they  
3 always appear on the bottom of a Daily Mail website, or can  
4 they appear on the top of the Daily Mail website as well?

5 A They can appear in different locations on the website.

6 Q Okay. So not always in the bottom; yeah?

7 A Not always in the bottom.

8 Q And sometimes on the top where you want to draw the  
9 reader's attention to the thing that follows pre-roll?

10 A No. Typically if they're higher than that, they will  
11 be in the body of the article where the user's reading an  
12 article and the article could be about something that  
13 occurred and we have a video of what occurred, and the user  
14 could click play, it will be sound on, and they would have a  
15 pre-roll video play ahead of that content.

16 Q Okay. And if the article is potentially a popular one,  
17 you would feature it higher up on the site; yeah?

18 A Our editors will sort of promote content around the  
19 site depending on what they think wants to be read.

20 Q Okay. And that all appears on the website version of  
21 The Daily Mail?

22 A That's on the website version.

23 MS. RHEE: Okay. Thank you, Your Honor.

24 THE COURT: All right. Does anybody anticipate  
25 calling Mr. Wheatland again?

1 MR. WOLIN: Yes, Your Honor. We may re-call him  
2 in rebuttal.

3 THE COURT: All right. Sir, I can't release you.  
4 You can go home today -- not back to the UK but to wherever  
5 you are here. Just stay in touch in case you're needed.  
6 You're not to discuss your testimony with any witness who  
7 has not yet testified. Thank you.

8 (Witness excused at 3:03 p.m.)

9 THE COURT: All right. Who is your next witness?

10 MS. WOOD: We have two read-ins, Mr. Bradbury and  
11 Ms. Pappu, and then we'll have a live witness after that.

12 THE COURT: Okay. Now, I need to know, what's the  
13 time estimate as to how long the read-ins are going to take?

14 MS. WOOD: The read-ins are roughly about 25 to  
15 30 minutes for the first one, and about 20 minutes for the  
16 second one, Your Honor.

17 THE COURT: All right. That's fine. Let me get  
18 my clerk in here.

19 MS. WOOD: Thank you, Your Honor.

20 And, Your Honor, we are reading some of these in  
21 for efficiency sake, so we do appreciate the cooperation of  
22 chambers with providing us someone to help read them in.

23 The portions that we'll be reading in are in the  
24 first tab that says designation digest, and then the full  
25 transcript is behind that.



1 THE COURT: All right.

2 MS. WOOD: And again, for efficiency, we'll just  
3 have one attorney reading both parts, the examination by  
4 both Google's counsel and plaintiffs' counsel.

5 The deposition of Robert Easton Bradbury, III was  
6 read as follows:

7 Q My name is Lauren Kaplin. I just introduced myself.  
8 I'm here representing Google.

9 Can you state your full name again for the record?

10 A Yes. Full name, Robert Easton Bradbury, III. Bo is  
11 the nickname, so more manageable.

12 Q And who's your current employer?

13 A GSD&M.

14 Q Okay. Okay. Your job title currently?

15 A Senior vice president, managing director.

16 Q Okay. So you've been doing marketing and advising then  
17 for 30 -- 30 years or so?

18 A Yes, ma'am.

19 Q What was your first position at GSD&M?

20 A Account director in our business development group.

21 Q And how long did you hold that position for?

22 A Approximately one year before transitioning into an  
23 account director leadership role on a new piece of business  
24 that the agency was fortunate enough to secure.

25 Q What business was that?

1 A That was Charles Schwab.

2 Q And how long were you in that role?

3 A I would say three years or so.

4 Q What about after that?

5 A Following that, I had the pleasure of supporting many  
6 clients over my time at GSD&M from there, supported some  
7 packaged goods, clients, Dial, Purex, Renuzit, Southwestern  
8 Bell Communications in the technology space, AARP in the  
9 advocacy membership space. As well as some projects along  
10 the way, Texas A&M University, Barbasol. And then had the  
11 pleasure of being asked to lead our United States Air Force  
12 partnership when a colleague retired. So I've been  
13 supporting that as the lead role for 12 years, going on 13.

14 Q Do you consider what types of media to use for a  
15 campaign?

16 A Yes.

17 Q How?

18 A It would be twofold, really, of what is the client  
19 objective for the particular initiative that is being  
20 supported. Then a consideration of the audience that we're  
21 trying to reach to achieve that objective. And those  
22 audiences again each have different habits and practices in  
23 terms of communication consumption.

24 And so we rely on certainly syndicated data,  
25 first-party data that the Air Force may have, as well as our

1 observations as a subject matter expert on behalf of the Air  
2 Force to assess and see and ultimately select the platforms  
3 which we recommend to the Air Force to pursue.

4 Q So you mentioned there's a number of things you take  
5 into account, two of them include the audience and the  
6 objective?

7 A Yes.

8 Q Can you describe the target audience for the US Air  
9 Force?

10 A Certainly. I would say the United States Air Force is  
11 a large complex organization with many career fields.

12 THE COURT: Let me stop for a second.

13 The Air Force is out of this case. Why are we  
14 doing this?

15 MS. WOOD: Because the defendant has listed I  
16 believe nine different FAA witnesses on their witness list.

17 THE COURT: I'm not going to have nine FAA  
18 witnesses testify. I can tell you that right now.

19 MS. WOOD: Okay.

20 THE COURT: But, I mean, the Air Force is not  
21 here. It's irrelevant about the Air Force.

22 Now, if there's something more specific --

23 MS. WOOD: These do go to market definition. The  
24 issues that relate to how advertising agencies such as GSD&M  
25 on behalf of the Air Force think about open-web display ads

1 as a category.

2 THE COURT: Let's get right to that. Where in the  
3 transcript?

4 MS. WOOD: I will note this is in the part of the  
5 transcript that was designated by defense counsel, so I'm  
6 happy to move on, and they can follow up with Your Honor.

7 THE COURT: Well, I'm beginning to think -- I  
8 mean, I don't know how large a redirect -- rebuttal case  
9 we're going to have, if any.

10 But right now, this would not appear to be  
11 relevant to the issues that are in this case, and/or it's  
12 redundant.

13 I've already heard from other advertiser-side  
14 folks about how, you know, you have to match the objectives  
15 to the audience. There's nothing new there. I don't need  
16 to hear it five times; okay?

17 MS. WOOD: Understood, Your Honor. If we do have  
18 some further information about how the -- this ad agency  
19 recognizes open-web display and the unique targeting  
20 associated with open, but if Your Honor feels like that's  
21 cumulative at this point, we'll move on with a different  
22 deposition.

23 THE COURT: All right. Let me hear from Google,  
24 Ms. Dunn.

25 MS. DUNN: Thank you.

1           Your Honor, we don't intend to call nine federal  
2 agency advertisers; we do intend to call some of them,  
3 because as counsel for the government just said, this is  
4 relevant to market definition, just as the plaintiffs  
5 calling various advertisers --

6           THE COURT: Well --

7           MS. DUNN: -- was relevant.

8           THE COURT: -- the market definition doesn't have  
9 anything to do with the U.S. Military; it has to do with  
10 what is -- whether we're talking about -- the whole fight,  
11 as I've thought, or one of the main fights is whether  
12 they're talking about simply basically open-web advertising.  
13 It doesn't make any difference if it's the U.S. military or,  
14 you know, Proctor & Gamble.

15           MS. DUNN: So I agree that it could be any one of  
16 a number of advertisers or market participants, but just as  
17 plaintiffs have called Goodway and GroupM and other  
18 advertisers, these are the advertisers who were deposed in  
19 this case.

20           THE COURT: It doesn't make any difference. It  
21 doesn't mean we're going to hear them at trial. We need to  
22 keep the case focused; all right?

23           MS. DUNN: Understood. And they will not be long  
24 exams, entirely not cumulative. But these are important  
25 witnesses to Google's defense in this case, and so we would

1 like -- we'd ask Your Honor to give us the opportunity to  
2 demonstrate to Your Honor that they are relevant rather than  
3 cutting this off ex ante.

4 THE COURT: This is your witness?

5 MS. DUNN: There's designations and  
6 counter-designations. This witness is not our witness. We  
7 have different witnesses.

8 THE COURT: All right. All right. Why don't we  
9 do this, you have some live witnesses out there?

10 MS. WOOD: We do, Your Honor. We also have some  
11 deposition designations of Google adverse witnesses that we  
12 would like to play, and we can pivot to those right now.

13 THE COURT: Let's go to those. I'll give you,  
14 again, overnight. You can look at this deposition. If  
15 there are new pieces of information, all right, that are  
16 relevant to either side's case that are within the  
17 designations, we can hear them tomorrow. All right. Okay.

18 So who is the next witness?

19 MS. DUNN: Thank you, Your Honor.

20 MS. WOOD: The read-in of Ms. Pappu.

21 THE COURT: I should probably have Ms. Reno come  
22 in to do that. This witness is female; is that right?

23 MS. SESSIONS: Yes, Your Honor.

24 THE COURT: I won't switch, but anyway.

25 MS. GARCIA: Good afternoon, Your Honor. Kelly

Garcia.

What you're receiving right now should be a binder that contains the designations from both sides. It also will have deposition exhibits that are also being offered into evidence. One of those exhibits is PTX 612, which I understand is already in evidence. The other two are PTX 618 and PTX 572. Those are subject to our stipulation, and we've met and conferred about this, and I understand there's no objection.

MS. SESSIONS: That's correct. No objection.

THE COURT: All right. They're both in.

(Plaintiffs' Exhibit Numbers 618 and 572 admitted into evidence.)

MS. GARCIA: There are three supplemental documents that we believe buttress and elucidate the testimony and are going to be handed up -- or have just been handed up to you -- are going to be handed up to you now. Those are PTX 373.

THE COURT: Wait. 743?

MS. GARCIA: 373.

THE COURT: 373. Go ahead.

MS. GARCIA: 373, and those are comments to a document that Your Honor heard about yesterday with Mr. Jayaram.

The next one is PTX 851.

1 THE COURT: All right.

2 MS. GARCIA: And I believe Your Honor's seen this  
3 before. This is a reference to chats and the term Vegas.

4 The last is PTX 1033, and this is also a reference  
5 to the witness's uses of chats.

6 THE COURT: All right. Any objection to those  
7 three coming in?

8 MS. SESSIONS: No, Your Honor.

9 THE COURT: All right. All three are in.  
10 (Plaintiffs' Exhibit Numbers 373, 851 and 1033 admitted into  
11 evidence.)

12 MS. GARCIA: And for efficiency sake, I'll be  
13 reading the questioning from both plaintiffs and defendant.

14 THE COURT: All right.

15 The deposition of Aparna Pappu was read as  
16 follows:

17 Q Could you please start by stating your full name on the  
18 record?

19 A Full name is Aparna Pappu.

20 Q When did you first begin work at Google?

21 A I -- it's a bit of a complicated answer. I actually  
22 was working for DoubleClick, and I believe it was -- started  
23 in 2008, I want to say, or 2007. And then Google acquired  
24 DoubleClick in 2008. And so, technically, I started on  
25 Google when the acquisition completed.



1 Q Did there come a time when your role at Google changed?

2 A Yes. Many times.

3 Q What did you do right after this?

4 A I don't recall the exact timelines, but my  
5 responsibilities increased. At one point, I was made  
6 responsible for the front end, the user interface that  
7 publishers, you know, could configure the ad server with,  
8 and then progressively became responsible for more and more  
9 parts of the publisher ad server.

10 Q Okay. You mentioned that after you were responsible  
11 for the front-end user interface, your role changed again  
12 and you gained more responsibilities.

13 Do you recall approximately when that was?

14 A After I was running the front end and the forecasting  
15 system, I actually changed roles. I don't recall when.  
16 Honestly, can't recall at all when, but I was made  
17 responsible for the Google Ad exchange. The engineering  
18 team, I should say.

19 Q Was that roughly before or after 2013?

20 A I just can't recall the exact dates. I don't remember.

21 Q After 2010?

22 A Yes. I believe it was after 2010. Yes.

23 Q When you say you were made responsible for Google ad  
24 exchange, what were some of your responsibilities?

25 A One was, you know, running the engineering team, all

1 the classic things of, like, making sure that we had great  
2 managers on the team, helped career growth for the folks on  
3 the team that we had meaningful kind of prioritized lists of  
4 work to do and things like that, so just --

5 Q Did you have any other roles at Google?

6 A After that?

7 Q Correct.

8 A So after being responsible for the ad exchange, at some  
9 point, I can't remember exactly when, I was made responsible  
10 for the DFP, DoubleClick for the Publishers' ad serving  
11 team, or the team that -- the team that built the system, as  
12 well the ad exchange. So both those teams. And then at  
13 some point after that was also made responsible for the  
14 AdSense team, and then I left the ads team.

15 Q When did you leave the ads team?

16 A I left in 2018.

17 Q You mentioned AdSense.

18 What is AdSense?

19 A AdSense is a product for publishers also, typically  
20 smaller publishers where they can put a tag on their page  
21 that allows them to call Google for ads basically.

22 Q And how did AdSense differ from DFP at that time?

23 A It's quite a big question, I would say.

24 AdSense was a more -- was a much more simple  
25 product with very few controls because it was meant for very

1 simple kind of publisher-use cases, if you will.

2 Q In your prior answer, you mentioned smaller publishers.

3 A Yes.

4 Q How would you use that term?

5 A Meaning publishers who didn't have a team who could  
6 configure, like, could hire people to run an ad server and  
7 things like this, because it requires people to administer.

8 Q And then, by contrast, how would you use the term large  
9 publishers?

10 A A publisher that had a team that would set up inventory  
11 that actually had sort of a direct sales team that would  
12 sell this inventory and, you know, just more complexity as a  
13 result of that.

14 Q And what product, if any, did Google market towards  
15 large publishers?

16 A DFP was the product that we built for large publishers.

17 Q Do you use chats to communicate with co-workers at  
18 Google?

19 A Yes.

20 Q How do you refer to those chats?

21 A Chat.

22 Q Okay. And have you ever used chats to refer to --  
23 excuse me. Strike that.

24 Have you ever used chats to communicate with  
25 co-workers about any aspects of Google's digital advertising

1 business?

2 A You mean for work? Yeah. We use chat as part of our  
3 normal day-to-day.

4 Q Have you taken any affirmative steps to preserve chats  
5 since receiving a litigation hold in this case?

6 A I just follow whatever the system is.

7 Q So can you tell me one way or the other whether you  
8 took steps to turn history on when discussing substantive  
9 matters?

10 A For work today, I think history is on by default now,  
11 but different -- different chat, I gesture, configurations  
12 had different settings for these things. So, yeah.

13 Q You said history is on by default now.

14 Was there a time when history was not on by  
15 default?

16 A Yes. I think it depended on I believe ad hoc chats,  
17 because these are informal kind of not super relevant in  
18 some sense.

19 THE COURT: All right. Now let me stop again.

20 This is repetitive. I've heard it dozens of  
21 times. I'm expecting that these depositions should be  
22 further redacted and corrected so I'm only taking my time to  
23 hear new information. All right.

24 Since you said this was going to be short, I'm  
25 going to let you get away with it, but I don't want anymore

1 depositions coming in that are simply repeating what I've  
2 heard multiple, multiple times.

3 All right. Go ahead.

4 MS. GARCIA: Understood, Your Honor. And I could  
5 further abbreviate it, but I'm not sure who designated what.

6 THE COURT: All right. Well, you have tonight to  
7 start doing that on any other depositions that either side  
8 plans to introduce.

9 MS. GARCIA: Thank you, Your Honor.

10 THE WITNESS: Like, just chitchat and that kind of  
11 thing, and those ad hoc chats, I believe, were history of.

12 Q And how did you distinguish between the ad hoc chat, as  
13 you described it, and a substantive chat?

14 A Just a force of habit usually to have substantive kind  
15 of conversations over email, and chat -- and chat was more  
16 chitchat.

17 Q So just to be clear, were there any different types of  
18 chats that you could use at the time to have substantive  
19 conversations?

20 A I don't know what that means.

21 Q If you wanted to have a conversation, a casual  
22 conversation with a co-worker via chat, would you use the  
23 same chat system --

24 A Yes.

25 Q -- as you would use to have a more substantive

1 conversation?

2 A Yes.

3 Q You said you left your role in -- on the ad side in  
4 approximately 2018?

5 A Yes.

6 Q Do you recall whether history was on default at the  
7 time you left your position in 2018?

8 A I don't recall.

9 Q And if the default setting on a group chat were history  
10 off, to your knowledge, how long would those chats be  
11 preserved?

12 A No idea.

13 Q When you were managing AdX but not additional products,  
14 can you give me an example of a feature that you developed  
15 during that time?

16 A Let's see. Not very clearly. But I can remember one  
17 which was about sizes, like creative sizes. Like,  
18 publishers would say, show an ad of this size or this size,  
19 and then we'd have to make sure that we matched it  
20 correctly. And it was always tricky because the creative,  
21 you know, you can't always tell for sure if it's the exact  
22 size or not and how do you enforce it and things like this.  
23 So that's the only one I have a vague recollection of.

24 Q Okay. And when you moved to become VP of AdX and DFP,  
25 can you give me an example of a feature that you worked on

1 during that time?

2 A So in 2017 when I was VP -- feature. So I wouldn't  
3 call it a feature, but there was definitely a lot of work  
4 being done with respect to -- you know, in general I would  
5 say this whole area of how do we make sure that we have  
6 infrastructure that isn't duplicated across the ad exchange  
7 and DFP, which were separate systems. And then how do we  
8 make sure that when we do ad serving across these systems,  
9 that we were as efficient as possible. We had a major  
10 project around -- at the time that I was leaving around  
11 header bidding and something called Exchange Bidding.  
12 That's kind of what I recall.

13 Q Was GDN an advertiser ad network?

14 A I don't know what that definition is, so it's basically  
15 what I described it, so ...

16 Q Sure. So if an advertiser participated in both AdX and  
17 an alternative ad exchange, could a publisher access that  
18 advertiser's budget through either AdX or ad exchange?

19 Excuse me.

20 A You could, yes.

21 Q Could publishers uses header bidding as a way to  
22 generate more revenue?

23 A Unclear to me if that is true or not.

24 Q Just trying to understand what you meant when you said  
25 "advertiser budget" before in this context.

1           The advertiser budget refers to how much an  
2 advertiser is willing to spend?

3     A     Correct.

4     Q     And so a publisher might use header bidding to access  
5 that willingness to spend by another publisher?

6     A     Possibly.

7           THE COURT: By another advertiser.

8           MS. GARCIA: Advertiser. Excuse me.

9           THE WITNESS: Possibly. But, you know, most of  
10 the time they sell their own inventory, and it's the  
11 leftover inventory that goes through the exchanges. And so,  
12 yes, for this additional leftover inventory, the demand you  
13 could get from advertisers could be spread out on multiple  
14 exchanges, could show up in many ways. That's a pretty  
15 complicated ecosystem, so I don't know that I know the full  
16 answer.

17     Q     Do you recall any suggestions by Google executives that  
18 Google's buy-side products should only buy on AdX  
19 impressions that are exposed through AdX to dry out header  
20 bidding?

21     A     We had many discussions on why you should buy on AdX,  
22 because it is a clean exchange, and that we protect users,  
23 protect advertisers, protect publishers. And so we were --  
24 because I worked on the sell-side, you know, was proud of  
25 the AdX that we built. And so in order to continue to live



1 up to those principles of healthy ecosystem and so on, I was  
2 always a proponent of buying on the exchange -- on the  
3 Google Ad exchange.

4 Q How did AdX protect publishers?

5 A There were many publisher features built in the  
6 exchange from protecting against malware, bad JavaScript.  
7 You know, if a publisher said no ads of a certain type of  
8 advertiser, then you would have to make sure that the  
9 winning ad, even if it won, actually met that criteria.

10 So there's a number of things that helped protect  
11 the publisher's brand, because you might not want crappy  
12 belly-fat ads or whatever on your page. So all of those  
13 things took a lot of engineering to get right.

14 Q You don't know whether these offerings were unique to  
15 AdX; is that right?

16 A I don't know if they were unique, but I know we had  
17 invested a lot, especially in the malware side of the house,  
18 and it was -- kind of a difficult problem. So I don't know  
19 if anyone else had something as good. I'd be surprised, but  
20 they could have.

21 Q You mentioned features of AdX that were good for the  
22 ecosystem; do you recall that?

23 A Yes.

24 Q Can you give me an example of features of AdX that were  
25 good for the ecosystem?

1 A The one I just gave about not accidentally loading  
2 malware on the end user's machine, adhering to the rules  
3 that a publisher might have set.

4 So, for example, if you had, say, show this ad,  
5 show an ad only of this size, it would be pretty bad user  
6 experience if the ad had JavaScript that just took over the  
7 whole page, because that's not what the publisher intended.  
8 So kind of -- those kinds of things are examples.

9 Q Sitting here today, are you aware of any specific  
10 publisher that considered turning off AdX but decided  
11 against it?

12 A I don't recall these details, no. Sorry.

13 Q Do you recall ever telling a publisher that they should  
14 not turn off AdX?

15 A I do not.

16 Q Do you recall being present when anyone from Google  
17 told the publisher that they should not turn off AdX?

18 A I do not recall.

19 Q Can you name any specific publishers that previously  
20 used AdX and then stopped using it?

21 A I cannot recall.

22 Q Setting aside names, do you recall whether or not there  
23 were any publishers that used AdX and then stopped using it  
24 during your tenure?

25 A I don't recall if it happened or not, but I'm sure --

1 publishers change configurations all the time, so it's not  
2 really something I look at.

3 Q You can't recall a specific example of a publisher that  
4 stopped using AdX; is that right?

5 A That's right.

6 Q Ms. Pappu, you are being handed what's been marked  
7 Pappu-lit Exhibit 2, which is a document with a Bates number  
8 beginning GOOG-DOJ-11781035. The metadata produced with  
9 this document, which is on the first page, indicates that  
10 the document was a corresponding attachment with the Bates  
11 stamp GOOG-DOJ-28501644. And the exhibit itself contains  
12 both documents.

13 Please take a moment to look it over, and I'll  
14 direct you to certain pages again. But please familiarize  
15 yourself, and let me know when you are ready.

16 All right. Ms. Pappu, are you familiar with this  
17 document?

18 A Not familiar, no.

19 Q You don't recognize the document?

20 A I am kind of reaching into my memory, to be honest. I  
21 know the concepts in here.

22 Q Is there anything about the document that suggests to  
23 you that this is not a document that came from your files?

24 A I'm sure it was in my drive somewhere for sure.

25 Q And what is it, for the record?

1 A It looks like it's a strategy paper. Usually we do  
2 strategies. Some of it's in Google, different parts of  
3 Google at different times, and we submit ideas for  
4 discussions.

5 Q Okay. I'm going to start by reviewing the second  
6 document after the blue sheet. But, first, could you tell  
7 me what the first document is?

8 A Oh. It sounds like it might be comments. The first  
9 document to a different document. So I'm not sure which  
10 document these comments refer to.

11 Q So I can represent to you that the metadata reflects  
12 that these comments correspond to the pricing strategy  
13 document.

14 A Got it.

15 Q You mentioned before that you remembered -- strike  
16 that.

17 Does reviewing the document refresh your  
18 recollection about materials discussed in the document?

19 A Not really. It's a long time ago. So this all  
20 computes, but yeah.

21 Q Do you recall that you were involved in discussions  
22 regarding AdX's revenue share levels in July 2018?

23 A I don't recall, but I see the comments here.

24 Q It says: "GDN demand via our sell-side products has  
25 the highest value to publishers because they treat networks

1 like GDN as new revenue that they could not get on their  
2 own"; do you see that?

3 A Yes.

4 Q This is a reference to GDN demand being available to  
5 publishers almost exclusively through AdX; is that right?

6 A That's not right.

7 Q At the time, GDN demand was available to publishers  
8 through other means besides through AdX?

9 A Yes.

10 Q What were those other means?

11 A Through AdSense.

12 Q Any other ways?

13 A Those are the two I know of.

14 Q Was GDN demand available to publishers through any  
15 non-Google products?

16 A GDN, representing the buy-side, could bid and do  
17 whatever they wanted. I know that they had this AWBid  
18 product, which allowed them to bid on other exchanges.

19 Q Okay. So what is AWBid?

20 A It was a way for GDN to bid on other exchanges.

21 Q Was it a feature of GDN?

22 A You could call it a feature, yes.

23 Q And approximately when did Google develop AWBid?

24 A I don't recall.

25 Q Do you recall whether or not it was during the

1 five-year period that we were speaking about earlier, 2013  
2 to 2018?

3 A Yes. I think it was in that period, not before.

4 Q So other than AdSense and AWBid, can you think of any  
5 other product or any other way that publishers could get  
6 access to GDN demand in July 2018?

7 A Not really, no.

8 Q I should say, other than AdX -- AWBid and AdX, could  
9 you think of any other way that publishers could get AdX --  
10 could get access to GDN demand?

11 A So sorry. Say that again. I lost track of all the  
12 acronyms.

13 Q That's fair.

14 So other than AdSense, AWBid and AdX --

15 A Yeah.

16 Q -- can you think of any other way that publishers could  
17 get access to GDN demand in July 2018?

18 A I can't really think of any other way, no.

19 Q So the sentence we were just reading makes reference to  
20 AWBid, and in parentheses says 3.5 percent of GDN gross  
21 revenue; do you see that?

22 A Yes.

23 Q At this time, less than 4 percent of GDN gross revenue  
24 was on AWBid?

25 A It sounds like it from this sentence.

1 Q Before Google developed AWBid, was there a way that  
2 publishers could get access to GDN demand other than AdSense  
3 and AdX?

4 A Not that I recall, no.

5 Q So going over to the next page, the top of the page  
6 ending 1646, it says: "Publishers frequently set a higher  
7 floor for AdX"; do you see that?

8 A Yes, I see that.

9 Q Could you explain to me what that means?

10 A A floor price is what I called the minimum price  
11 earlier for an auction. So publishers can decide what the  
12 minimum price is if they want AdX to fill that particular  
13 slot.

14 Q And so when it says higher floor for AdX, what makes  
15 the -- in comparison to what -- sorry. Strike that.

16 Publishers would set a higher floor for AdX than  
17 they would set for an alternative exchange; is that right?

18 A That sounds right, yes.

19 Q Why would publishers set a higher floor for AdX than  
20 they would set for an alternative exchange?

21 A It could be any number of reasons, but one of the  
22 reasons was that publishers were weary of low-quality ads.  
23 I referred to belly-fat ads earlier. That was not  
24 theoretical. Those kinds of ads did exist from advertisers  
25 on the GDN. And sometimes setting a high floor prevented

1 low-quality ads from showing up. It was an imperfect way of  
2 doing it, but yeah.

3 Q Are there any other reasons why publishers would set a  
4 higher floor for AdX than they would set for an alternative  
5 exchange?

6 A That's the only one I remember.

7 Q Sitting here today, you cannot think of any other  
8 reason why a publisher would set a higher floor for AdX than  
9 any other exchange?

10 A No.

11 Q And your response that this was to avoid low-quality  
12 ads.

13 What's the basis for that response?

14 A Basically this is -- I mean, this was understood at the  
15 time. Now, how we got that knowledge, I don't know whether  
16 it was, you know, product research.

17 Also in the early days, you know, when the ad  
18 exchange started, it started off with publishers putting  
19 their toe in the water with respect to auction-based, you  
20 know, demand. And so perhaps the early experience was all  
21 not-so-great ads.

22 Q And did you learn that by speaking with publishers?

23 A I did not speak to publishers, but that was a thing,  
24 like, known. Maybe it was publisher feedback through the  
25 product or other means of gaining feedback.



1 Q So this is something you learned through internal  
2 discussions with others at Google; is that right?

3 A Yes.

4 Q Who was involved in those discussions?

5 A This was back in the early days of AdX. So probably  
6 either Scott Spencer or someone in his product team.

7 Q So to be clear, can you recall a specific conversation  
8 with Scott Spencer in which he conveyed that publisher  
9 feedback was that they used -- they set a higher floor for  
10 AdX?

11 A Wait. That was a question?

12 Q Sorry. You know what, I wasn't done.

13 A Oh.

14 Q I'll start over.

15 To be clear, can you recall a specific  
16 conversation with Scott Spencer in which he conveyed any  
17 publisher feedback to you about AdX?

18 A I can't recall a specific conversation, but Scott and I  
19 talked about publisher stuff all the time as a part of our  
20 jobs.

21 Q Okay. You mentioned product research.

22 Is there any specific product research that you  
23 can recall that would speak to this issue?

24 A No. Just the part of a normal product development.

25 Like, we had, you know, user research teams, product teams,

1 that talked to customers.

2 Q So your recollection that publishers would set a higher  
3 floor for AdX than they would set for any alternative  
4 exchange because they were weary of low-quality ads came  
5 solely from discussions with Mr. Spencer?

6 A I don't remember. Like I said, very likely it was one  
7 of our discussions, but --

8 Q But you can't recall any other -- speaking with anyone  
9 else about this topic?

10 A No.

11 Q And you can't recall reviewing any studies about this  
12 topic?

13 A No.

14 Q And you can't recall reviewing any other documents  
15 about this topic?

16 A No.

17 Q Before you referred to the early days and concern to  
18 publishers in the early days, approximately what time period  
19 was that?

20 A When the ad exchange -- the first couple of years when  
21 it launched.

22 Q And so concerns expressed by publishers in the early  
23 days, you would be referring to concerns expressed by  
24 publishers before 2014?

25 A Yes.

1 Q And this document was written in 2018; do you see that?

2 A I do not see it. Yeah. I see it in the title.

3 Q In about 2018, did you have any discussions with others  
4 internally at Google about why a publisher might set a  
5 higher floor for AdX?

6 A I don't recall.

7 Q So you don't know one way or the other why a publisher  
8 would set a higher floor for AdX in 2018?

9 A Yeah. I do not know one way or the other.

10 Q Do you recall, setting aside the document, having any  
11 specific conversation with Mr. Bellack about AdX revenue  
12 share being 20 percent?

13 A I don't recall specifically, but we had many  
14 conversations on rev share.

15 Q And other than what's written in this document, you  
16 don't have any independent recollection of what you  
17 discussed with Mr. Bellack about AdX's revenue share at this  
18 time?

19 A Outside of the fact that we would discuss it  
20 occasionally, but don't have any specific recollection of --  
21 more like a debate, how much it should be, that kind of  
22 thing.

23 Q And who is ultimately responsible for setting AdX's  
24 revenue share at this time?

25 A I don't know who was responsible. It just was. It was

1 20 percent. So I'm not sure who made that call.

2 Q So despite having discussions with Mr. Bellack about  
3 whether AdX's revenue share should be something other than  
4 20 percent, your understanding is that it remained about  
5 20 percent during your tenure?

6 A Yes.

7 Q Do you recall why AdX's revenue share remained at  
8 20 percent through 2018?

9 A I don't recall why. But, you know, these things are  
10 generally -- lots of debates are had, and if there's a  
11 reason to go to change something, then it happens, and if  
12 there isn't, then it doesn't.

13 Q The comment references Jim's point of drop AdX buy-side  
14 to 10 percent to be competitive.

15 Do you know what he's referring to when he says  
16 "competitive" there? I should say it's your language, so  
17 let me back up.

18 You are referencing Jim's point of drop AdX  
19 buy-side to 10 percent to be competitive. What did you mean  
20 by "competitive" there?

21 A "To be competitive," my guess would be basically that  
22 other exchanges, like it says in the document, are generally  
23 at 10 percent. So to drop the rev share to be like the  
24 other exchanges.

25 Q How might dropping the rev share make AdX more

1 competitive?

2 A I think it was in line with competition. If the  
3 competition was generally at 10 percent.

4 Q Can you name a specific company that competed with AdX  
5 at this time?

6 A Other exchanges you mean?

7 Q Yes.

8 A So other exchanges, like I said, Index is one that  
9 comes to mind, and Rubicon.

10 Q And so did you take Mr. Giles's point to be that to  
11 remain competitive with Index and Rubicon, AdX should drop  
12 its revenue share to 10 percent at this time?

13 A So that was Jim's point. I don't know what the  
14 question is.

15 Q It says: "He and I talked about accredited value over  
16 the years for services that pubs pay for outside of -- or  
17 outside DFP that are now a part of DFP"; do you see that?

18 A Yes.

19 Q Do you recall what discussion that's referring to?

20 A I don't know what "AIH" stands for, but over time, you  
21 know, when there are gaps in the product, in the DFP, for  
22 example, I don't know what seasonality specifically refers  
23 to. Then publishers would have to go outside of DFP to be  
24 able to get those kinds of capabilities. And over time, we  
25 actually kind of filled those gaps in DFP by building them.

1 So I think the logic here is, since we improved DFP over the  
2 years to fill these gaps, then just change the price of DFP  
3 to reflect the new value.

4 Q When you say publishers would have to go outside of  
5 DFP, would publishers use an alternative publisher ad  
6 server?

7 A No.

8 Q So how would publishers go outside of DFP?

9 A So sometimes there are features. Likely, you know,  
10 seasonality here, for example, might be around our  
11 forecasting capabilities, might have been more primitive,  
12 and so you might have to offer -- you might have to layer on  
13 other seasonality trend detection kind of thing through  
14 external systems.

15 They are not actually ad-specific, but sometimes  
16 CD analyses and things like this. So if you build that into  
17 DFP, you then reduce the friction for the publisher to have  
18 to export this data, do the analysis, and then come back in.

19 Q So those publishers would keep DFP but then go to  
20 another software company for those additional features?

21 A Yes.

22 Q But they would remain customers of DFP; is that right?

23 A In this case, yes.

24 Q And then when DFP added those features, the publisher  
25 didn't have to go to another software company to get

1 additional features?

2 A I think that's the logic here of this sentence. Yep.

3 Q And so at this time, publishers paid the 20 percent rev  
4 share?

5 A Correct. I mean, they were charged the 20 percent.  
6 They didn't pay us.

7 Q Can you elaborate?

8 A Publishers don't pay us for this transaction. The way  
9 the auction works is -- remember, we talked about the  
10 clearing price and then the transaction. Whatever the  
11 clearing price is, 20 percent of that is what we would keep  
12 in the ad exchange for the service, and 80 percent would go  
13 to the publisher.

14 Q At this time, AdX would keep 20 percent of the clearing  
15 price, and the remaining 80 percent would go to the  
16 publisher; is that right?

17 A That's right.

18 Q Let's mark this as Exhibit 3.

19 (Whereupon Pappu-lit Exhibit 3, GOOG-DOJ-32034896  
20 through 4898 was marked for identification as of this date  
21 by the reporter.)

22 THE COURT: All right. Now what I'm going to --  
23 not suggest, require, for anymore depositions that get read  
24 in is when you're referencing an exhibit, I want the exhibit  
25 number for this trial substituted. This does me no good.

1 Okay?

2 MS. GARCIA: Your Honor, I believe this is  
3 PTX 572. Yes.

4 THE COURT: All right.

5 MS. GARCIA: 618. Excuse me. PTX 618. Thank  
6 you.

7 THE COURT: All right. Go ahead.

8 (Plaintiffs' Exhibit Number **618** admitted into evidence.)

9 BY MS. GARCIA:

10 Q Ms. Pappu, you've just been handed what's been marked  
11 PTX 618, which is a document with a Bates number beginning  
12 with GOOG-DOJ-30 -- or, excuse me, 32034896.

13 Please take a moment to review the document and  
14 let me know when you're ready.

15 I'm going to start by asking you about the email  
16 that begins at the bottom of the page ending 4896, the email  
17 from Mr. Bellack from Wednesday, June 20th, 2018, at  
18 11:54 a.m.; do you see that?

19 A 11:54. Sorry. Are you sure it's 11:54? Oh. This  
20 one. Yes. Yeah.

21 Q Do you see where I'm looking?

22 A Yes, I do.

23 Q So here Mr. Bellack asks: "How much actual value is  
24 there in auction yield management, get bids, compare bids,  
25 pick winner"; do you see that?



1 A Yes.

2 Q What did you understand Mr. Bellack to be saying here?

3 A I think he is saying how much value is there to  
4 publishers in that particular aspect of the auction, which  
5 is the actual bidding and the auction itself.

6 Q I should have asked, were you familiar with this  
7 document?

8 A I don't remember it, no.

9 Q But, for the record, what is it?

10 A It's an email exchange, a group of people discussing  
11 pricing ideas.

12 Q Do you have any reason to doubt that you received this  
13 email?

14 A I do not.

15 Q And so looking back at the email from Mr. Bellack, he  
16 goes on to ask: "Is there really that much more value in  
17 just comparing auction versus reservations?"; do you see  
18 that?

19 A Yes.

20 Q What did you understand Mr. Bellack to be saying here?

21 A I actually don't know what he means here. I feel like  
22 apples/oranges, so I'm not sure what he means on this one.

23 Q Did you ask him for clarification?

24 A It doesn't look like it.

25 Q But sitting here today, you don't have any

1 understanding of what Mr. Bellack is referring to here?

2 A No.

3 Q What do you understand Mr. Bellack to be saying here?

4 A It sounds like he's saying do we want to have a  
5 conversation with publishers about charging more, increasing  
6 the prices of DFP ad serving. It makes an assumption that  
7 they don't value it.

8 Q And why would someone from Google have a discussion  
9 with publishers about increasing the pricing of DFP ad  
10 serving at this time?

11 A It's a normal sort of periodic conversation. I think  
12 DFP ad serving prices have gone up over time, so this would  
13 be, you know, a normal conversation to have.

14 Q Do you recall approximately how many times DFP ad  
15 serving prices have gone up?

16 A No.

17 Q But you do recall that, over time, DFP ad serving  
18 prices increased?

19 A Yes. For example, when we did the video ad serving, I  
20 remember that it was more expensive. The price to serve a  
21 video ad impression then, you know, web because it's just  
22 more expensive to build. The costs were higher.

23 Q Mr. Bellack suggests that this is -- that Google is  
24 considering charging more for something they don't value.

25 Is the "they" in that sentence referring to

1 publishers?

2 A I believe so, yes.

3 Q And what is he saying publishers don't value?

4 A He's making an assumption that publishers don't value  
5 DFP, is my guess here. Meaning, the ad serving aspect of  
6 it, the reservation ad serving.

7 Q Did you ask him what his assumption was based on?

8 A I did not.

9 Q Do you know one way or the other whether his assumption  
10 was based on conversations with publishers?

11 A I don't know what his assumption is based on.

12 Q But Mr. Bellack, at this time, was on the product team  
13 that interfaced with the publishers; is that right?

14 A That's right.

15 Q Okay. And then your email, under the header AdX you  
16 write: "For all programmatic, i.e., transactions, including  
17 AdX and EB." What is EB referring to there?

18 A EB refers to Exchange Bidding.

19 Q So "for all programmatic, i.e., transactions, including  
20 AdX and EB, sell-side charges for taking on risk of being a  
21 clearinghouse. So whatever 2 percent to 10, whatever we  
22 think the market can bear, but ideally closer to 2 percent."

23 Did I read that correctly?

24 A Yes.

25 Q What did you mean when you said "risk of being a

1 clearinghouse"?

2 A What I meant by that is, we do the publisher payout  
3 based on the transactions. Like we discussed in the  
4 auction, what the clearing price is. Based on that, the  
5 publisher makes money, and so every month we would pay the  
6 publisher whatever they were owed, whether or not the buyer  
7 paid us. And we would hope that the buyers would eventually  
8 pay us. So what the publishers didn't have to worry about  
9 was am I going to be paid or not, which was often kind of a  
10 pain for them, so we took away that pain.

11 Q And here you're suggesting AdX's revenue share should  
12 be between 2 percent and 10 percent; correct?

13 A It seems like it, yes.

14 Q And then you say it should be ideally closer to  
15 2 percent; correct?

16 A Yes.

17 Q Why did you think it ideally should be closer to  
18 2 percent?

19 A It was just a stab based on clearinghouse being the  
20 thing, the assumption that the clearinghouse is the thing  
21 that publishers value. If they value other things, then  
22 that assumption doesn't hold.

23 Q And then in looking at the email from Noam Wolf, he  
24 asked you "why closer to 2 percent is your ideal"; do you  
25 see that?

1 A Yes.

2 Q And you respond: "Just using credit cards as my  
3 baseline and thinking about the value we provide"; do you  
4 see that?

5 A Yes.

6 Q And so your understanding was that credit card  
7 companies charge about 2 percent, a 2 percent fee to process  
8 transactions over their network; is that right?

9 A I think that was the assumption, yes.

10 Q And in the case of credit cards, your view is the fee  
11 corresponds to the risk of being a clearinghouse?

12 A Basically, yes.

13 Q And so are you saying here that AdX changed pipes to be  
14 programmatic?

15 A I know what this means now. Noam has a reference to  
16 something that says "PG" in the line below, so this is  
17 referencing that.

18 So it's basically a reservation ad, except it was  
19 served programmatically. And so the programmatic meaning is  
20 a bit complicated.

21 Should I explain it?

22 Q Please.

23 A Okay. So, you know, we talked about reservation ads in  
24 DFP. The ad would be placed by us, and then DFP would have  
25 to go reconcile at the end of the month with whoever they

1 sold that inventory to and make sure that they're paid. And  
2 then they would have to make sure that -- did you share the  
3 impression, per our agreement and, you know, all of that  
4 sort of process.

5           So by doing it programmatically via this thing  
6 called "PG," I can't recall what it stands for now, I want  
7 to say programmatic guaranteed, yeah, you don't have to do  
8 any of that and that we would take care of that for you.  
9 And so that's what a programmatic line item -- a  
10 programmatic reservation meant.

11 Q     That's helpful. And here you say "unless we bring the  
12 demand."

13           What are you referencing there?

14 A     So the reference here is the greatest thing that the  
15 publishers did in terms of value to themselves was to  
16 actually find great advertisers who want to advertise on  
17 their -- you know, their direct sales team and would go out  
18 and bring that demand.

19           And so I'm just stating here -- it sounds like  
20 that unless we, meaning Google, helps them bring the demand,  
21 just doing the automatic reconciliation is not necessarily  
22 useful enough to charge 10 percent as the rev share, is the  
23 hypothesis here at least.

24 Q     Is part of what AdX did this automatic reconciliation  
25 that you just referenced?

1 A Yes. That's what the clearinghouse thing references  
2 earlier.

3 Q We spoke earlier about the value of the Google stock  
4 that you currently own; do you recall that?

5 A Yes.

6 Q Do you know whether the value of your stock is closer  
7 to 5 million in value or 1 million in value?

8 A Do you mean the vested stock or the unvested? How  
9 should I think about this question?

10 Q Let's start with the vested stock.

11 A The vested is the part that I have the least view into  
12 because it's on some automatic schedule and I -- the machine  
13 just runs it. I have no idea.

14 Q And what is the value of the unvested stock, roughly?

15 MS. SESSIONS: And I'm just going to stop. I  
16 think we -- it's possibly our mistake that we did not  
17 designate the number in this transcript as confidential,  
18 but --

19 THE COURT: I'm surprised. But, anyway, yeah.

20 MS. SESSIONS: I think that was an oversight on  
21 our part, but I would ask that the number not be read into  
22 the record as the value of Ms. Pappu's stock.

23 THE COURT: Well, it's in the record now. We'll  
24 just have the transcript that will, at some point, be  
25 public, have it stricken from the transcript.

1 MS. SESSIONS: Thank you, Your Honor.

2 MR. BLANCHARD-WU: Should I read the portion and  
3 leave the number out?

4 MS. GARCIA: Your Honor --

5 THE COURT: We don't need anything more.

6 MS. GARCIA: Thank you, Your Honor.

7 THE COURT: All right. Are there any more  
8 depositions at this time?

9 MS. WOOD: We do have a video we could play that's  
10 26 minutes from a different Google witness, Mr. Rowley.  
11 It's 26 minutes. Or sorry 23 and a half, I'm told.

12 THE COURT: All right. So you don't need my clerk  
13 any longer?

14 MS. WOOD: No. And then we'll work overnight to  
15 narrow them down further.

16 THE COURT: All right. That's fine.

17 Thank you, Evan.

18 MS. SESSIONS: Your Honor, to that end, I would  
19 just make a request. I don't know if this is going to be an  
20 issue. But to the extent that there are additional  
21 depositions of the Google witnesses that the Department of  
22 Justice intends to make part of the record, we would ask  
23 that those be done by video rather than via read in of the  
24 transcript, because I do think the inflection and intonation  
25 of the witness is important.



1 THE COURT: Oh, I don't know. Some of the accents  
2 have made it difficult. And, frankly, I don't know. So I  
3 can hear Evan very clearly.

4 But I really want to get a handle on the  
5 depositions. So since you're on your feet, Ms. Wood, how  
6 many more witnesses, I want the name of the witness and what  
7 they are, if they're a Google employee or if they're a  
8 third-party or what. Okay.

9 Who else are you planning to call?

10 MS. WOOD: Yes. By deposition?

11 THE COURT: By deposition.

12 MS. WOOD: So we started Mr. Bradbury. We will  
13 meet and confer about that. We just did Ms. Pappu. We have  
14 a Google employee, Mr. Rowley, by video. We have a  
15 third-party publisher ad server witness, Mr. Shaughnessy,  
16 which is approximately a 20-minute read-in. We have a  
17 Google employee, Mr. Cox, which is approximately five-minute  
18 read-in. We have a Google employee, Mr. Kim, which is  
19 approximately 10- to 15-minute read-in, or video if we need  
20 to do that, but I do think the read-ins are faster. And  
21 then we have a Google employee, Ms. Stewart, which is less  
22 than ten minutes, and Ms. Hsiao which is less than ten  
23 minutes. But, again, we will narrow those further this  
24 evening to ensure --

25 THE COURT: They need, at this point, to add

1 something new. Not just a repeat. I've heard the  
2 20 percent take a million times. I don't need to hear it  
3 again; okay?

4 MS. WOOD: Understood. For example, with this  
5 witness, I think you understood her to say she thought  
6 between 2 and 10 percent was an appropriate take rate, so we  
7 consider that new. The 2 percent I don't believe you've  
8 heard other witnesses say, Your Honor.

9 THE COURT: Well, I'm not sure that really is all  
10 that valuable anyway. But, in any case.

11 All right. Now those are your deposition  
12 witnesses at most?

13 MS. WOOD: And then, I'm sorry, one further one.  
14 Mr. Levitte is a Google witness. I don't have the time  
15 estimate with me now, but I think it's approximately  
16 30 minutes as well by video.

17 THE COURT: All right. And then for live  
18 witnesses, who is left?

19 MS. WOOD: We just have two experts, Dr. Simcoe  
20 and Dr. Lee. And then Mr. Bellack tomorrow morning is the  
21 adverse direct of the Google employee -- former Google  
22 employee.

23 THE COURT: All right. So for this afternoon  
24 then, what do we have?

25 MS. WOOD: This afternoon we were going to

1 continue with the Rowley video and then do Mr. Simcoe, and  
2 then we could do some of the additional shorter read-ins if  
3 there's time remaining, or we can dismiss for the day and  
4 consolidate.

5 THE COURT: Oh, no. No. No. We're going to keep  
6 moving.

7 MS. WOOD: Understood.

8 THE COURT: All right. Let's call the next  
9 witness then.

10 MS. WOOD: Okay.

11 THE COURT: Do you want to do the video?

12 MS. WOOD: The video of Mr. Rowley would be next,  
13 Your Honor.

14 THE COURT: All right.

15 (Video deposition of B. Rowley played.)

16 MS. WOOD: Can you pause. We just need to pass  
17 out the binders. And we can identify before we play it. I  
18 believe the one exhibit that is referenced is PTX 278, which  
19 is the back of the binder that is already in evidence. And  
20 then we may have some additional documents related to  
21 Mr. Rowley that we would like to move in at this time, and  
22 they are all subject to the stipulation we have with Google.

23 THE COURT: Go ahead.

24 MS. WOOD: They are PTX 144. PTX 174. PTX 445.  
25 PTX 604. PTX 759. PTX 767. PTX 792. PTX 953. PTX 978.

1 PTX 993. PTX 1017. And PTX 1728.

2 And, Your Honor, what we would propose in this  
3 regard for these documents that we are submitting, not  
4 through live examination, we have citations in our proposed  
5 findings of fact to each of these documents, and we could  
6 give Your Honor a written document that would indicate where  
7 precisely in the proposed finding of fact these documents  
8 are cited and quoted for Your Honor's review.

9 THE COURT: All right.

10 MS. WOOD: And here are the documents I just  
11 mentioned.

12 And those are all admitted, Your Honor?

13 THE COURT: Yes. They're all in.  
14 (Plaintiffs' Exhibit Numbers 144, 174, 445, 604, 759, 767,  
15 792, 953, 978, 993, 1017, 1728 admitted into evidence.)

16 MS. WOOD: Thank you. And, with that, I think  
17 we're ready for the Rowley video to play.

18 (Video deposition of B. Rowley played.)

19 THE COURT: We should stop at this point. It's.  
20 Time for the afternoon break. We're switching our court  
21 reporters. All right. We'll be back in session at 4:30.

22 (A brief recess was taken.)

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I certify that the foregoing is a true and accurate  
transcription of my stenographic notes.

Stephanie Austin

Stephanie M. Austin, RPR, CRR